

DATABASING AND GEOREFERENCING HISTORICAL COLLECTIONS
TO DISCOVER POTENTIAL SITES FOR RARE AND ENDANGERED
PLANTS OF NEW YORK, U.S.A.

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ABSTRACT

Over 400 years of natural history inventories of preserved specimens and vouchers in museums and research institutions are now important repositories of invaluable information and permanent records documenting life on earth. Plant collections, in particular, play roles in understanding climate change, conservation modeling, molecular and medicinal studies, invasive-species management, and biodiversity assessments. Researchers reexamine these collections in order to establish conservation priorities for threatened and endangered taxa. Herbarium specimens, spanning many decades, can provide data on a natural population's geographical range and its shift over time. Although historical specimens provide valuable information about past distributions, label information may lack geographic coordinates or precise locations, or may have descriptions that are too vague or confusing to be useful. Here we present a case study for plant specimens collected by Thomas F. Lucy in the late 1800's in Chemung County, New York. The goal of this research was to determine if Lucy's label localities could be improved using historical land use and topographic maps, and georeferenced using Google Earth®. Lucy documented 134 plant families for the Chemung County area: 106 species of flowering plants (ca. 982 taxa, excluding hybrids), 12 fern and fern allies (48 taxa), 13 mosses (21 taxa), and one species each for lichens, liverworts, and algae. Nine taxa are noteworthy for the state of New York. Fourteen taxa are listed as endangered, threatened, or unknown: *Chaerophyllum procumbens* (Apiaceae), *Arabis shortii* (Brassicaceae), *Cacalia suaveoleus* and *Lactuca floridana* (Compositae), *Carex retroflexa* (Cyperaceae), *Hydrangea arborescens* (Hydrangeaceae), *Allium cernuum* and *Chamaelirium luteum* (Liliaceae), *Liparis lilifolia* and *Platanthera hookeri* (Orchidaceae), *Polygonum erectum* (Polygonaceae), *Lysimachia quadrifolia* (Primulaceae), *Geum virginianum* (Rosaceae) and *Vitis vulpina* (Vitaceae). Nine other plants are recommended for protection: *Panax quinquefolium* (Araliaceae), *Rudbeckia fulgida* (Compositae), *Carex conjuncta* (Cyperaceae), *Pterospora andromedea* (Ericaceae), *Aesculus grabra* (Hippocastanaceae), *Epilobium ciliatum* (Onagraceae), *Cypripedium arietinum* (Orchidaceae), and *Calamagrostis porteri* and *Panicum scoparium* (Poaceae).

KEY WORDS: New York, Chemung County, flora, Thomas F. Lucy, rare plants, endangered plants, historical collections

RESUMEN

Más de 400 años de inventarios de historia natural de especímenes conservados y testigos en museos e instituciones de investigación son actualmente importantes almacenes de información invaluable y registros permanentes de la vida documentada en la tierra. En particular, las colecciones de plantas juegan un rol importante en la comprensión del cambio climático, modelos de conservación, estudios moleculares y médicos, gestión de especies invasoras, y evaluaciones de biodiversidad. Los investigadores reexaminan estas colecciones con el objetivo de establecer las prioridades en la conservación para aquellos taxones amenazados y en peligro. Los especímenes de herbarios, que abarcan varias décadas, pueden aportar datos del rango geográfico de una población natural y su cambio a lo largo del tiempo. A pesar de que los especímenes históricos provean información valiosa sobre distribuciones pasadas, la información etiquetada puede carecer de coordenadas geográficas o de localizaciones precisas, o pueden contener descripciones demasiado vagas o confusas como para ser útiles. Aquí presentamos un estudio de un caso para especímenes de plantas recogidos por Thomas F. Lucy a finales de siglo XIX en Chemung County, Nueva York. El objetivo de esta investigación es determinar si las localizaciones etiquetadas de Lucy podían ser mejoradas utilizando usos históricos del terreno y mapas topográficos, y georreferenciados utilizando Google Earth®. Lucy documentó 134 familias de plantas para el área de Chemung County: 106 especies de plantas con flores (ca. 982 taxones, excluyendo híbridos), 12 helechos y relacionados con helechos (48 taxones), 13 musgos (21 taxones) y una especie de cada uno de los siguientes grupos: líquenes, hepáticas y algas. Nueve taxones son dignos de mención para el estado de Nueva York. Catorce taxones se encuentran listados como en peligro, amenazados, o desconocidos: *Chaerophyllum procumbens* (Apiaceae), *Arabis shortii* (Brassicaceae), *Cacalia suaveoleus* y *Lactuca floridana* (Compositae), *Carex retroflexa* (Cyperaceae), *Hydrangea arborescens* (Hydrangeaceae), *Allium cernuum* y *Chamaelirium luteum* (Liliaceae), *Liparis lilifolia* y *Platanthera hookeri* (Orchidaceae), *Polygonum erectum* (Polygonaceae), *Lysimachia quadrifolia* (Primulaceae), *Geum virginianum* (Rosaceae) y *Vitis*

vulpine (Vitaceae). También se recomienda la protección de otras nueve plantas: *Panax quinquefolius* (Araliaceae), *Rudbeckia fulgida* (Compositae), *Carex conjuncta* (Cyperaceae), *Pterospora andromedea* (Ericaceae), *Aesculus grabra* (Hippocastanaceae), *Epilobium ciliatum* (Onagraceae), *Cypripedium arietinum* (Orchidaceae), y *Calamagrostis porteri* y *Panicum scoparium* (Poaceae).

INTRODUCTION

For over 400 years, natural history inventories have been conducted throughout the world, resulting in preserved specimens or vouchers housed in museums and research institutions worldwide, representing over 350 million specimens (Thiers, continuously updated). These inventories resulted in a variety of studies on flora and fauna from local checklists to highly detailed monographs. Collections, along with their associated label information, are proof that certain taxa existed in a specific place and time. In the past, specimens were the fundamental tools for taxonomy and systematic studies, but now that role is expanding to include molecular work, georeferencing, and other technologically advanced fields.

Plant collections, in particular, now play roles in climate change research (Abu-Asab et al. 2001; Lavoire & Lachance 2006; Robbirt et al. 2011), conservation modeling (Ferrier 2002; Funk & Richardson 2002; MacDougall et al. 1998; Mace 2004), and molecular (Ames & Spooner 2008; Castro & Menale 2004; O'Gorman et al. 2008) and medicinal (Eisenman et al. 2012) studies. Herbarium specimens can be used to document spatio-temporal distribution of exotic species (Barney et al. 2008; Delisle et al. 2003) and to guide invasive-species management (Carter et al. 2007; Woods et al. 2005) and biodiversity (O'Connell et al. 2004) assessments. In determining conservation priority for threatened or endangered taxa, it is important to understand the population's natural extent and biogeographical range, and how its range has shifted over time (Farnsworth & Ogurcak 2006). Label data from recently collected specimens (i.e., the past 50 years) generally have current identifications and more precise locality data, and may have geographic coordinates such as latitude/longitude or UTM coordinates. Historical specimens, likewise, contain valuable locality data; however, lack of geographic coordinates, vague or incomplete descriptions, and/or references to places no longer in existence make using these data challenging. Before geospatial analyses is performed, the information associated with a collection (e.g., written description of location, date, and habitat) must be captured in a database, either through data entry or through automated processes. Variability in label information format, locality name abbreviations, completeness, and quality may require revisions to the initial data entry before assigning GPS coordinates.

Here we present a case study for plants collected by Thomas F. Lucy in the late 1800s in the Chemung County area of New York (Fig. 1). The goal of this research was to: 1) develop a database from the BUF-Lucy collection and generate labels, 2) consolidate all the Lucy collections into a database, update the nomenclature, and georeference specimens, 3) identify historical localities of plant taxa now rare and endangered, and those recommended for protection in New York, and 4) produce a map of potential sites for these plants.

Background

Thomas F. Lucy (1844–1906) spent approximately thirty years collecting botanical specimens in the Chemung River Valley of New York (Kelloff et al. 1990; Kelloff & Kass 1993). His herbarium, along with the collections of other local botanists, contributed to Clute's (1898) *Flora of the Upper Susquehanna and its Tributaries*, and completed a series of local floras spanning from Lake Ontario to Eastern Pennsylvania. Meticulously annotated and mounted, Lucy's specimens were part of the natural history collections of the Elmira Academy of Sciences (Kelloff & Kass 1993). Eventually, Elmira College acquired the collection (Brooks 1900), which became the core of the Elmira College Herbarium (ECH, Table 1). This collection was studied and annotated at the college by Dr. Stanley J. Smith (later Curator at the New York State Museum at Albany) in 1945 and 1947 (Smith 1945). It was then "lost" until 1984, when it was rediscovered in the back of a storage room. The collection was ultimately moved to the College's Carnegie Science Hall, where it was databased (Kelloff et al. 1990; Table 1). In 2000, the L.H. Bailey Hortorium Herbarium (BH) at Cornell University received the Lucy herbarium (ECH-Lucy) from Elmira College. Revision of the nomenclature began (Graver et al. 2005).

Further research indicated that the Buffalo Museum of Science (BUF) was the main repository for Lucy's herbarium (Chaudhri et al. 1972; Kelloff & Kass 1993). Correspondence with Robert Zander, then curator at



Fig. 1. Location of Chemung County in New York State.

BUF, confirmed that BUF did have Lucy's collections (Letter R. Zander, to the authors, 21 Jan 1986; Table 1); however, most were un-mounted, still in period newspaper, and stored in boxes. The authors originally believed these to be duplicate specimens of the ECH-Lucy herbarium; but after further examination discovered that Lucy continued to collect plants. Thomas Lucy and his wife, Emma, moved to Buffalo, New York in June of 1900, where he died in 1906. His collection, along with others from the Buffalo Botanical Garden Herbarium, was later transferred to BUF (Eckel 1990). Without adequate labels, BUF was considering disposing of the collection to make room in the herbarium; but BUF agreed to keep the collection if labels could be made. ECH arranged to have the collection sent to the U.S. National Herbarium (US).

MATERIALS AND METHODS

Databasing the BUF-Lucy collection and generating labels

The BUF-Lucy collections were not without information. Lucy had annotated the bottom corner of the newspapers with the Patterson (1892) species number. Within the sheets, along with the specimens, he included notes on scrap paper (Fig. 2) briefly providing the location, date, habitat, and other miscellaneous information. Although the information was not always clearly written, our previous research with the ECH-Lucy collection was helpful in reading his handwriting and understanding the resources he referenced (Kelloff et al. 1990; Kelloff & Kass 1993).

Care was vital in handling the brittle 100-year-old newspapers, as Lucy penciled Patterson's number for species determinations on the lower edges. Sometimes a second number enclosed in a "box" or circle was penciled near the Patterson number: these referenced Oyster's (1888) numbers for species determinations from the 2nd edition of *Catalogue of North American Plants*. Lucy studied *Salix* while in Buffalo (not part of this paper) and occasionally cited Andersson (1867). In the database, an abbreviation such as "Sul. Hill" is typed Sullivan Hill or "Ch. R." for the Chemung River. Tobacco farming became popular in Chemung County in the late 1800's and large plantations were given names like Blazing Star, Sunrise, and Fruit Homestead (Pierce 1879). Since these locations were familiar to Lucy, he used abbreviations such as "F.H." and "Fruit H." in his notes. Where words or names could not be read, data entry workers used brackets and the illegible word would appear as Cl[], [illeg.] or [].

About 30% of the collection had preprinted labels (occasionally blank or with data filled in), which Lucy

TABLE 1. Summary of Thomas F. Lucy collections databases from Elmira College (ECH, now housed at BH) and the Buffalo Museum of Science (BUF), and the consolidation of these databases with all known Lucy collections from other museums, herbaria, and institutions into a Master database.

ECH	Original herbarium of Elmira College with the majority of the mounted specimens from T. F. Lucy. Lucy's collection, along with other local botanists, provided the framework for Clute's (1898) <i>The Flora of the Upper Susquehanna and Its Tributaries</i> (Kelloff et al. 1990; Kelloff & Kass 1993).
Lucy specimens	Database of <i>mounted</i> Lucy's specimens with labels, incorporated into the BUF herbarium (unpublished list at BUF from R. Zander).
ECH-Lucy	Database of <i>mounted</i> specimens with labels, originally at ECH (Kelloff et al. 1990; Kelloff & Kass 1993) and later transferred to BH. Partially annotated with updated names by Graver et al. (2005) using Mitchel & Tucker, 1997.
BUF-Lucy	Database of unmounted specimens from BUF mostly collected by Lucy or received on exchange. Preliminary database by Tilden (Tilden et al. 2008). Unmounted specimens and database transferred to US. This database updated and labels generated (Kelloff & Kass, this report). A copy of this database presented to BUF and BH. A full set of specimens from this collection returned to BUF with a subset of duplicates distributed to BH, US, and other herbaria (see text).
Lucy-Master	Combined database of all of above, PLUS specimens located at herbaria other than ECH, BUF or BH, compiled by Kelloff (Kelloff & Kass, this report). Specimens collected by Lucy in the Chemung County area of New York were georeferenced from this master list. Database on file at BH.

used when he exchanged specimens. Five different preprinted label headers were found: Flora of New York, Flora of the Upper Waters of the Susquehanna, Herbarium Americanum, Herbarium Novum Yorkum, and Flora Americae Septentrionalis. Before 1880, Lucy had used handwritten labels in red ink (for images see Kelloff et al. 1990 and Kelloff & Kass 1993). The BUF-Lucy database (Table 1) included all information found with the specimens and new labels (Fig. 3) printed for all collections. Once the collection had labels, BUF received a full set of specimens and a copy of the database.

Merging the ECH-Lucy (completed in 1985) and BUF-Lucy databases facilitated updating the nomenclature. Lucy tended to use various references (Gray et al. 1890; Torrey Botanical Club 1894) and checklists (Heller 1898; Mann 1872; Oyster 1888; Patterson 1892) that did not always agree on species determination. On the ECH-Lucy specimen labels, Lucy would cite multiples references when the nomenclature differed. Understanding the literature used and how the classification varied helped in updating the nomenclature. Several resources were utilized: on-line databases (USDA & NRCS 2015; Royal Botanic Garden Kew et al. 2013; Missouri Botanical Garden 2015; ITIS 2012), monographs (Clausen & Smith 1939; Coulter & Rose 1888; Greenman 1915; Jones 1946; Kruschke 1964; McNair 1925; Nesom 1997; Pimenor & Leonov 1993; Rydberg 1913; Williams 1937), books (House 1924; Mitchell & Tucker 1997), citations to Lucy's collections (McNair 1925; Williams 1937) and specialist annotations.

Merging all Lucy collections into a Master database and georeferencing the collection

A master database (Table 1, Lucy-Master) was generated by merging all the records from the BUF-Lucy and ECH-Lucy databases with Lucy collections found at J.F. Bell Museum of Natural History Herbarium (ABSL), Cornell University (BH), Brooklyn Botanic Garden (BKL), Boise State University (Boise St U), Buffalo Museum of Science (BUF), George Safford Torrey Herbarium (CONN), Royal Botanic Garden Edinburgh (E), Elmira College (ECH, now housed at BH), Field Museum of Natural History (F), University of Michigan (MICH), Missouri Botanical Garden (MO), W.S. Turrell Herbarium (MU), C.E. Bessey Herbarium (NEB), New York Botanical Garden (NY), New York State Museum (NYS), Ohio State University (OS), Muséum National d'Histoire Naturelle (P), University of Wyoming (RM), University of Missouri (UMO), U.S. National Herbarium (US), University of Wisconsin (WIS), and SEINet, a consortium of herbaria databases from the United States.

Many place names in Lucy's 100-year-old locality data referred to farms (Harrington, Rutan, Lowman), watersheds (Hendy Creek, Seeley Creek), people (Mrs. Cranes, Tremain, Tubbs), businesses (Old Grist Mill, Paynes Shops, Woolen Mill) and roads that have changed names (River Road, Plank Road, Latty Brook Road). Historical accounts of the county (Towner 1892) also provide clues to locations like "Hammond's Corner" and

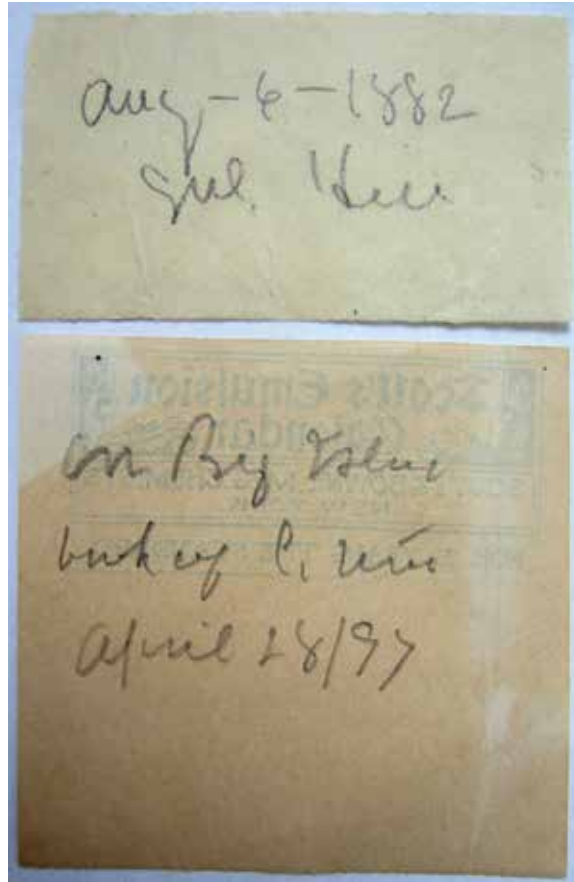


FIG. 2. Two examples of Thomas F. Lucy's notes on scrap paper found with the specimens. Top: Aug 6, 1882, Sullivan Hill. Bottom: on Big Island, bank of Chemung River, April 28, 1897.

“Blazing Star Farm,” and geological studies provided locations of quarries (Clarke & Luther 1905). Lucy's original collection localities were found using historical land use maps (Beers 1869; Pidgeon 1896; Rea & Tremble 1853; Miller et al. 1904), topographic maps (U.S. Geological Surveys 1969a-h), driving guides to historical trails (Chemung Valley History Museum 2006), and Google Earth©. For example, the mill pond in Pine Valley was found on a 1869 map (Beers 1869) and appears as an outline in Google Earth© (Fig. 4). The farm of Alfred Searles, Fruit Homestead (Fig. 5), demarcated in the (Beer) 1869 map of Ashland, later became part of the Newtown Battlefield State Park (Anon. 1922). The island locally known as Harrington Island (Anon. 1897, 1930) appears on late 1800 maps as Baldwin Island (Fig. 4 & 6).

Sorting the Lucy-Master database by date provided a way of comparing localities with possible duplicate specimens. A sedge collected on 11 Jul 1896 and sent on exchange to CONN and MO listed “Elmira” whereas the BUF specimen listed the more precise description “along Newtown Creek, above Woolen Mills.” The Woolen Mills, found on historical maps, were on Clark Street in Elmira. Although Clark Street no longer exists, Google Earth© shows the site as an open field with a “shadow” of Clark Street still visible.

A number of computer-based, automated georeferencing tools, such as GEOLocate (Rios & Bart 2010) and BioGeomancer (Guralnick et al. 2006), can process large numbers of records; but for this project, and

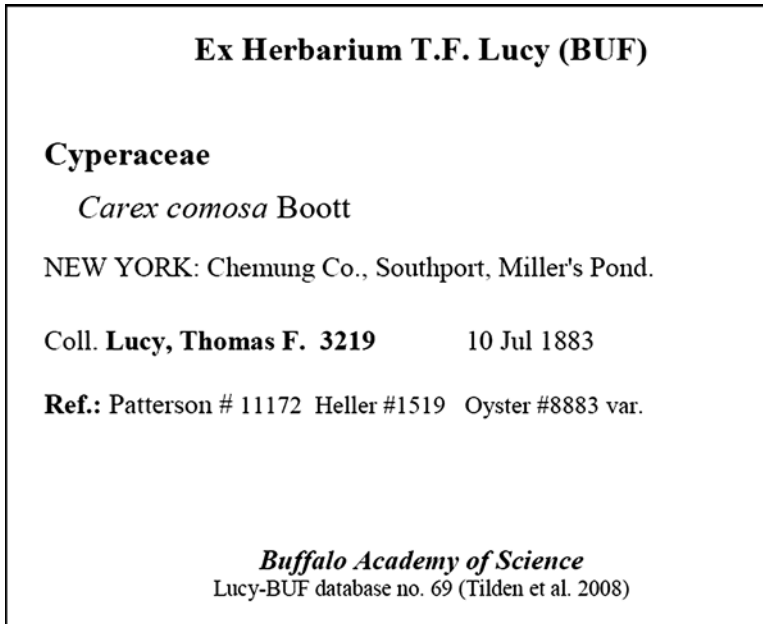


FIG. 3. New label generated from the information found with the collection, including any references to Patterson (1892), Heller (1898), and Oyster (1888) checklists.



FIG. 4. Left: Historical mill pond in Pine Valley from the (Beer) 1869 map. Right: The former mill pond outlined in white as seen from Google Earth®.

because of the age of the collections, spatial coordinates from the locality information were manually determined on a specimen-by-specimen basis. It is possible to narrow down historical collecting sites using maps, Google Earth®, and other resources. The goal was to provide the best fit for each locality (Chapman & Wieczorek 2006; Garcia-Milagros & Funk 2010), with the understanding that each specimen location was an estimation of the actual collecting site.



Fig. 5. The farm of Alfred Searles, Fruit Homestead, as it appears on the (Beer) 1869 map of the town of Ashland.



Fig. 6. Baldwin Island, historically known as Harrington's Island in the Chemung River with the ford indicated on the northern end of the island (U.S. Geological Survey 1899).

RESULTS

BUF-Lucy database and generating labels for the unmounted collections from The Buffalo Museum of Sciences (BUF).

The BUF-Lucy database had over 2700 records and more than 2525 plant specimens (ca. 4900 individual sheets/duplicates), contributed by 123 individual collectors, including prominent botanists of the day: Charles F. Millspaugh, Amos A. Heller, Henry H. Rusby, and Henry N. Patterson (see Tilden et al. 2008 for more details on the collectors). The collection numbers varied from single collections to as many as 15 duplicate sheets. BUF

received a full set of specimens with newly-generated labels as well as all original notes and labels found in the collections. Smaller sets of duplicates with new labels (and sometimes original labels, if available) were distributed to Smithsonian Institution (US), L.H. Bailey Hortorium Herbarium (BH), Elmira College Herbarium (ECH, as duplicates were already at BH), New York Botanical Garden (NY), Missouri Botanical Garden (MO), University of Michigan Herbarium (MICH), and New York State Museum (NYS).

The collection from BUF-Lucy comprised more than just unmounted duplicates of the ECH-Lucy collection (Kelloff & Kass unpublished data; Tilden et al. 2008). Although Lucy's collection constituted the bulk (over 77%) of the BUF-Lucy herbarium, only 42 specimens were duplicates from Elmira (ECH-Lucy).

Merged databases and georeferencing the Lucy collections

Label data varied between institutions. Lucy did not use consecutive collection numbers, as is the general practice today. Instead, his collection numbers varied according to his needs or those he exchanged with, and included Patterson or Heller checklist numbers (flyer, Smithsonian Institution Archives; see Fig. 1 in Kelloff et al. 1990), a "cat. no." from the Mann (1872) checklist or a collection number that would be used for a species regardless of the place or date that specimen was collected, or no number at all (i.e., *s.n.*). In addition, since the labels were handwritten or "stamped," Lucy seldom provided all the information on specimens sent out on exchange. To find possible duplicate collections between institutions, the date and the identification became the unique identifier. In some cases, Lucy's collection practices and lack of a clear locality prevented the connection.

The Lucy-Master database comprises over 5200 plant records collected by Lucy or acquired in exchange. Filtering the database for "Lucy" and "Chemung County" found over 2740 specimen records from approximately 270 unique localities. This list became the foundation of the annotated checklist (Appendix).

When compared to the 1105 taxa in Clute's (1898) *Flora of the Upper Susquehanna* (which encompasses a little over seven counties), Lucy's survey of the plants of Chemung County was extensive. In all, Lucy documented 134 plant families just in the Chemung County area: 106 species of flowering plants (ca. 982 taxa, excluding hybrids), 12 fern and fern allies (48 taxa), 13 mosses (21 taxa), and one species each for lichens, liverworts, and algae.

The Lucy collection documents a number of notable species from Chemung County. Lucy discovered two new taxa: *Xanthium arcuatum* Millsp. & Sherff (Holotype F, Millspaugh & Sherff 1918) and *Prenanthes trifoliolata* (Cass.) Fern. forma *leptomera* Sherff (Holotype F, isotypes F, BH; see Appendix). In a letter now attached to his collection of *Prenanthes* at the Field Museum, Lucy stated that this taxon [which he originally named *Prenanthes altissimus dissecta*] is "worthy of even specific rank," as it "follow[s] in the involucre as to color and form" but is "widely divergent" in leaf color and size, standing nearly 7 feet tall.

His collections included 23 taxa of conservation interest: 14 taxa listed as endangered, threatened, or unknown (Mitchell & Tucker 1997; see Table 2), and nine additional plants recommended for protection (Mitchell & Sheviak 1981) because of loss of habitat or over-collecting: *Aesculus grabra* Willd. (Hippocastanaceae), *Calamagrostis porteri* A. Gray (Poaceae), *Carex conjuncta* Boott (Cyperaceae), *Epilobium ciliatum* Raf. (Onagraceae), *Panax quinquefolium* L. (Araliaceae), *Panicum scoparium* Lam. (Poaceae), *Pterospora andromedea* Nutt. (Ericaceae), *Rudbeckia fulgida* Aiton (Compositae), and *Cypripedium arietinum* R. Br. (Orchidaceae, which is recommended for High Priority) (see Appendix for herbaria where specimens are deposited).

Using the Lucy-Master database, approximately 86% of Lucy collections from the Chemung County area had sufficient locality data to add spatial coordinates. Since the range of error for each locality will vary depending on the detail provided, the latitude/longitude are estimates or starting points for relocating extant populations of these plants. Many areas in Chemung County, New York, where Lucy collected, are still undeveloped, including Mt. Zoar Hill, areas of Pine City, Van Etten Swamp, Greatsinger's Corner, Jenkin's Woods, and Mountain House Narrows (aka Old Mountain House Narrows). Established as parkland in 1879, Sullivan Hill still has much of the woods surrounding the hilltop. Two maps generated from the coordinates in the

TABLE 2. Plants collected by Thomas F. Lucy in Chemung County, New York, that have been listed as endangered (E), threatened (T), or of unknown (U) status in New York State (Mitchell & Sheviak 1981; Mitchell & Tucker 1987). The New York State Natural Heritage Program (NYNHP) publishes a two-part code that ranks species based on global (G) and state (S) rarity that is used by The Nature Conservancy (TNC; Young 2017). The plants are listed by family (column one), current name (column two), rarity status (NY State, column three, NYNHP/TNC code, column four), collection locality, date, T.F. Lucy collection number, and herbaria where deposited (column five). Spatial coordinates removed in this report for protection of potential sites and plants.

Family	Taxa	NY State Designation	NYNHP/TNC Rank	Collection locations
Apiaceae	<i>Chaerophyllum procumbens</i> (L.) Crantz	E	G5 SH	Along D.L.&W. railroad, below Harrington Ford, only station, 28 May, s.n. 1892 (F); D.L.&W. railroad, Ashland, 28 May 1882, 875 (ECH); Below Harrington's Ford, along the D.L.&W. railroad, 28 May 1880, 875 (BUF)
Brassicaceae	<i>Arabis shortii</i> (Fern.) Gleason	E	G5 SH	Chemung River bank, 29 May 1887, s.n. (BUF)
Compositae	<i>Cacalia suaveoleus</i> L.	E	G5 S1	Elmira, no date, s.n. (BUF)
Compositae	<i>Lactuca floridana</i> (L.) Gaertn.	E	G5 SH	Greatsinger's Corner, Jenkin's Woods, along roadside by the woods, 1 Aug 1876, 732 (BUF, US)
Cyperaceae	<i>Carex retroflexa</i> Muhl. ex Willd.	E	G5 S1	Sullivan Hill, 13 Jun 1886, 930 (ECH); Sullivan Hill, in woods and thickets, 13 Jun 1886, 930 (BUF)
Hydrangeaceae	<i>Hydrangea arborescens</i> L.	E	G5 S1	Wellsburg Narrows, cool rivers, frequent, 2 Jul 1896, s.n. (BUF, F); ravine west of Old Mountain House, cool rocky ledges, 5 Aug 1896, 711 (ECH); Wellsburg Narrows, 26 Jul 1892, 711 (ECH)
Liliaceae	<i>Allium cernuum</i> Roth.	T	G5 S1S2	Sullivan Hill, on dry warm hills, 6 Aug 1882, 299 (ECH); Old Mountain House Narrows, on rocky dry banks and hillside, 9 Aug 1898, 299 (ECH)
Liliaceae	<i>Chamaelirium luteum</i> (L.) A. Gray	T	G5 S2	Wilks Jenkins Farm, Blazing Star Swamp, woods and damp spots, 12 Jun 1880, 47 (ECH); Jenkin's Farm, swamp on farm, 20 Jun 1880, 47 (BUF)
Orchidaceae	<i>Liparis lilifolia</i> (L.) L. Rich. ex Ker Gawl.	T/E	G5 S2	Pine City, near East Hill, Stone Quarry, 9 Jun 1898, s.n. (BUF); Orchid Glen, East Hill, cool ravine, 22 Jun 1898, 1135 (BUF); Orchid Glen, moist rocky ledge in ravine, 22 Jun 1898, 1135 (ECH)
Orchidaceae	<i>Platanthera hookeri</i> (Torr.) Lindl.	E	G5 S1S2	Mt Zoar Hill 16 Jun 1896, 984 (BUF); Mt Zoar woods, elevated woods, high woods, top of hills, 16 Jun 1896, 699 (ECH); near Latty Hill Road, woods, 16 Jun 1896, s.n. (BH, BUF, US); Sullivan Hill, 22 Jun 1879, 699 (BUF)
Polygonaceae	<i>Polygonum erectum</i> L.	U	G5 SX	Ashland, 18 Sept 1887, s.n. (BUF, US); Ashland, in moist or dry soil, 18 Sept 1887, 599 (ECH); Elmira, 16 Sep 1899, 1357 (BH, BUF, US)
Primulaceae	<i>Lysimachia quadrifolia</i> L.	E	G5? S1	Sullivan Hill, thickets, slopes of ravines, 9 Jul 1882, 57 (ECH); location unknown [based on date of other collections, probably Orchid Glen], 22 Jun 1898, s.n. (F)
Rosaceae	<i>Geum virginianum</i> L.	E	G5 S1	Marsh W of Wellsburg, low ground, marshes, 2 Jul 1896, 590 (ECH); Van Etten Swamp, 13 Jun 1899, 1284 (BUF); Mt Zoar Hill, woods, 13 Jun 1897, s.n. (BUF); Miller's Pond, 5 Aug 1897, s.n. (ECH, BH, BUF, NY, US)
Vitaceae	<i>Vitis vulpine</i> L.	T	G5 S2	along the Chemung River, stream banks or near water, 28 May 1887, 464 (ECH); near Old Mountain House, along the Chemung River, rocky river banks, 9 Aug 1898, 464 (ECH)

Lucy-Master database using ArcMap 10.3.1 (ESRI 2011) indicate: 1) all known collecting locations (Fig. 7), and 2) possible locations of those plants recommended for protection (Fig. 8).

Although Chemung is the smallest county in the state of New York, Lucy felt it had a "fairly good flora" for its size in comparison with other counties in the state. He divided the county into five sub-floras—the

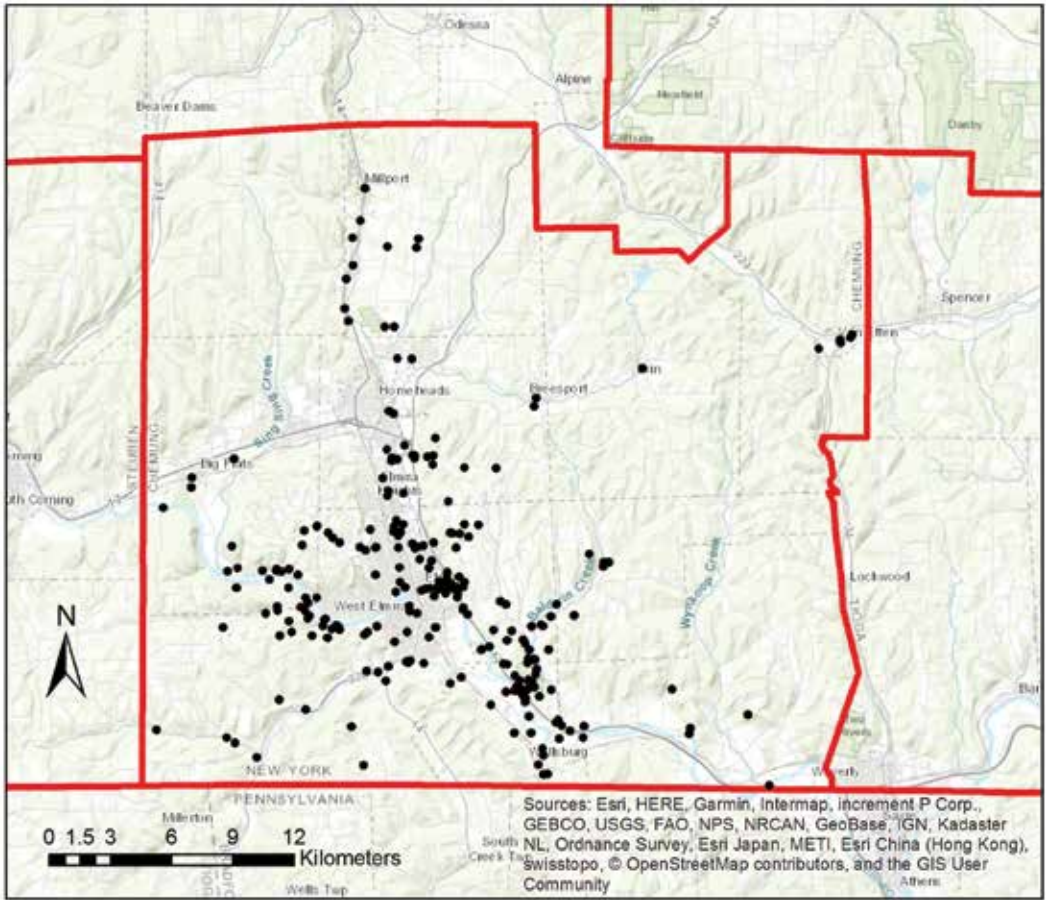


FIG. 7. A map plotting all known collecting localities of Thomas F. Lucy in Chemung County, New York.

Chemung River and its alluvial flats, the creek bottoms, the woodlands, the swamps and low grounds, and the ponds—and discussed the rare species in each area. He commented on the habitat destruction of Eldridge Lake and on the interesting flora found at Lowman’s Swamp (Lucy 1891). In some cases, Lucy’s reports on the plants he had found are more detailed than the labels provided (Lucy 1881, 1882, 1883a, 1883b, Torrey Botanical Society 1881).

CONCLUSION

In addition to increasing knowledge of taxonomy and systematics, natural history collections in museums and herbaria are used for building understanding of impacts of global change on humans and nature, assessing biodiversity, developing conservation priorities, and other applications.

The greatest threat to the variety of species found on this planet is habitat loss. Even Lucy noticed habitat loss during his collecting in Chemung County. He commented, “The primitive flora of Eldridge Lake has been almost completely destroyed by the park there made,” and he observed that it may have been the only “station” for species no longer found (Lucy 1891). Housing in southern Elmira has always surrounded Miller’s Pond and Ward 8. Sullivan Hill is now part of the Newtown Battlefield State Park, with some clearing near the monument. Mt. Zoar Hill, Mountain House narrows, Van Etten Swamp, and areas around East Hill are still relatively

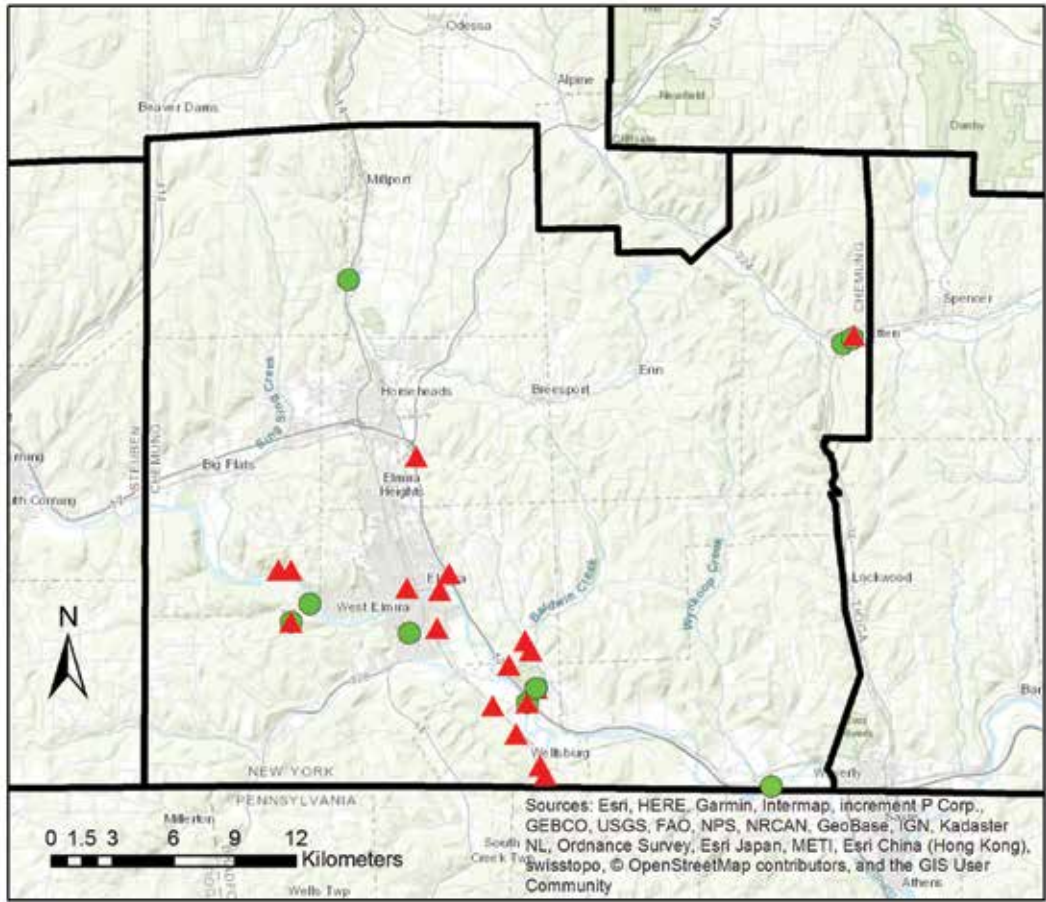


FIG. 8. A map plotting all possible areas for taxa of conservation interests collected by Thomas F. Lucy in Chemung County, New York. Red triangles ▲ represent areas of taxa listed as endangered, threatened, or unknown for the state of New York. Green circles ● represent areas for taxa recommended for protection.

undeveloped. Hurricane Agnes caused the Chemung River to overflow its banks in 1972 and may have changed the plant communities along its course.

However, there is some good news for Chemung County. Dr. Steven Young, and later Dr. Steven Clemants, then of the New York State Natural Heritage Program, used the Lucy herbarium at Elmira College (ECH) to investigate areas for rare plant species. Working under Clemants' direction, Grebleski et al. (1992) conducted a preliminary survey in 1988 of about 48 known sites where Lucy collected in Chemung County, and concluded that the condition of the Chemung Valley at these Lucy sites were still in the same condition 100 years later.

Although Lucy's collections were not originally georeferenced and some of the place names have changed, integrating his locality descriptions with historical maps, publications, and Google Earth®, has provided useful location data in Chemung County, NY. With the completion and provision of an annotated checklist containing all the Lucy collections made in Chemung County, their localities, dates, and where the collection is now housed, as well as georeferenced "starting points," researchers and conservationists can begin to seek out possible surviving populations of these rare and endangered plants of New York State and to implement conservation strategies. (Table 2 – For the protection of potential sites and plants, spatial coordinates are not given in this report, but will be available at BH.)

APPENDIX

Annotated checklist of plants collected by Thomas F. Lucy, in Chemung County, New York.

This annotated checklist is a compilation of the plant specimens collected by Thomas F. Lucy in the Chemung County area of New York from 1866 to 1900. Label information was databased from collections housed at the J.F. Bell Museum of Natural History Herbarium (ABSL), Cornell University (BH), Brooklyn Botanic Garden (BKL), Boise State University (Boise St U), Buffalo Museum of Science (BUF), George Safford Torrey Herbarium (CONN), Royal Botanic Garden Edinburgh (E), Elmira College (ECH, now housed at BH), Field Museum of Natural History (F), University of Michigan (MICH), Missouri Botanical Garden (MO), W.S. Turrell Herbarium (MU), C.E. Bessey Herbarium (NEB), New York Botanical Garden (NY), New York State Museum (NYS), Ohio State University (OS), Muséum National d'Histoire Naturelle (P), University of Wyoming (RM), University of Missouri (UMO), U.S. National Herbarium (US), University of Wisconsin (WIS), and SEINet, a consortium of herbaria databases from the United States. Updating the nomenclature came from various resources (see literature cited) and the synonymies (original identifications in the collection) placed in **bold**. The New York State Natural Heritage Program (NYNHP) publishes a two-part code that ranks species based on global (G) and state (S) rarity that is also used by The Nature Conservancy (TNC). Global rankings are G1 (globally imperiled) to G5 (globally secure); GH (historical, but may be rediscovered), and GX (extinct). State rankings are S1 (critically imperiled) to S5 (demonstrably secure); SH (historical, but may be rediscovered) and, SX (presumed extirpated). (For more explanation of ranks and codes, see Young 2010, 2017.) New York State status (Mitchell and Sheviak 1981; Mitchell and Tucker 1987) of endangered (E), threatened (T), or unknown (U) has been noted. The plants are listed by family, current name, rarity status (State and the NYNHP/TNC code), collection locality, date, T.F. Lucy collection number, and herbaria where deposited. Spatial coordinates are not in this report for protection of potential sites and plants. Unidentified specimens (indet.) or unresolved taxa are at the end of the family or at the end of the checklist. Locations enclosed by brackets [] were added by the author based on other collections on the same date. Pro parte [p.p.] after the collection number indicates a mixed collection (several taxa on one page).

Lucy did not use consecutive collection numbers, as is the general practice today. His collection numbers varied according to his needs or those he exchanged with, and included Heller (1898), Oyster (1888), and Paterson (1895) checklist numbers; Mann's (1872) "cat. no.," a "coll. no.," or a collection number that would be used for a species regardless of the place or date that specimen was collected; or no number at all (i.e., *s.n.*). The collection number in the checklist includes authors to other checklist(s) when possible. Occasionally, only labels and notes remained in the newspaper, so a question mark (?) denotes distribution in the checklist.

A primary goal of this inventory of the Lucy collection was to document the occurrence and possible locations of rare and endangered plants, and those considered recommended for protection for the state of New York. The list is arranged by Phyla/Division and alphabetically by family and taxa. Taxa of conservation concern are indicated by "S" for rare and endangered and by "*" for recommended for protection.

CHAROPHYTA

Characeae

Chara sp.—Elmira, Chemung River, bottom, 11 Jul 1884, *s.n.* (BH, BUF, US); Tubb's Farm, 21 Jul 1888, *s.n.* (BH, BUF, US).

MARCHANTIOPHYTA

Marchantiaceae

Jungermannia polymorpha (L.) Hook. f. & Taylor—[**syn: Marchantia polymorpha L.**] Sullivan Hill, 7 Jul 1895, *s.n.* (BUF, US).

ASCOMYCOTA

Cladoniaceae

Cladonia furcata (Huds.) Schrad.—Elmira, Water Cure Hill, 16 Apr 1893, 3003 (BUF); Elmira, Water Cure Hill, on bank, roadside, 17 Apr 1893, 3006 (BH, BUF, US).

Peltigeraceae

Peltigera leucophaea (Nyl.) Gyal.—Elmira, Water Cure Hill, 16 Apr 1893, 3004 (BH, BUF, US).

BRYOPHYTA

Amblystegiaceae

Calliergon cordifolium (Hedw.) Kindb.—Van Etten Swamp, 13 Jun 1899, 3007 (BUF); Jenkin's Woods, 9 May 1898, 3012 (ECH, BH, BUF, MO, US); Jenkin's Woods, 9 May 1898, 5012 (NY).

Bartramiaceae

Bartramia pomiformis Hedw.—Elmira, Water Cure Hill, on bank, dry woods, 17 Apr 1893, 3005 (ECH, BH, BUF, MO, US).

Bartramia pomiformis Hedw. var. *pomiformis*—Elmira, East Hill, on bank, 24 Apr 1893, 5007 (NY); Elmira, on bank & elevated roadside, 17 Apr 1893, 5005 (NY).

Bryaceae

Bryum caespiticium Hedw.—near Tremain's, on log, 8 May 1893, 3009 (BUF); pond, on rotting logs, 8 May 1893, 5009 (NY).

Climaciaceae

Climacium dendroides (Hedw.) F. Weber & D. Mohr—no location, ca. 1893, s.n. (BUF?).

Dicranaceae

Dicranum scoparium Hedw.—back of upper Reservoir, woods, 29 May 1898, 3013 (ECH, BH, BUF, MO); Upper Reservoir, West Hill, woods in back of reservoir, 29 May 1898, 5013 (NY).

Funariaceae

Funaria hygrometrica Hedw.—no location, ca. 1893, s.n. (BUF).

Hylocomiaceae

Rhytidiadelphus triquetrus (Hedw.) Warnst.—East Hill, Chemung River, on banks, 24 Apr 1893, 5008 ½ (NY).

Hypnaceae

Callicliadum haldenienum (Grev.) H.A. Crum—no location, ca. 1893, s.n. (BUF, MO, US).

Hypnum imponens Hedw.—no location, ca. 1893, s.n. (BUF); near Tremain's, 8 May 1893, 3011 (BUF, US).

Mniaceae

Plagiomnium ciliare (Mull. Hal.) Kop.—inlet of upper Reservoir, 29 May 1898, 3014 (BH, BUF, US); Elmira, over Water Cure Hill, 16 Apr 1893, 3003 (BUF).

Plagiomnium cuspidatum (Hedw.) Kop.—near Tremain's, low ground on rotten trunks, 8 May 1893, 3010 (ECH, BH, BUF, MO, US); Greatsinger's Corner, low ground, on rotten trunks of tree, 8 May 1893, 5011 (NY); Greatsinger's Corner, low ground, on rotten trunks of tree, 8 May 1893, 5010 (NY).

Plagiomnium medium (Bruch & Schimp.) T.J.Kop.—inlet of Upper Reservoir west, Elmira, 29 May 1898, 5014 (NY).

Plagiotheciaceae

Plagiothecium laetum Schimp.—no location, ca. 1893, s.n. (BUF).

Polytrichaceae

Atrichumalte cristatum (Renauld & Cardot) Smyth & Smyth—near Tremain's, on log, 8 May 1893, 3009 (BUF).

Polytrichastrum (Polytrichum) sp.—Sullivan Hill, 13 Jun 1886, 3002 (BUF, MO, US).

Polytrichum juniperinum Hedw.—on ground, 8 May 1893, 5008 (NY).

Polytrichum pallidisetum Funck—near Tremain's, on ground, 8 May 1893, 3008 (BH, BUF, MO, US); near Tremain's, on log, 8 May 1893, 3009 (BUF).

Tetraphidaceae

Tetraphis pellucida Hedw.—near Tremain's, on log, 8 May 1893, 3009 (BUF).

Thuidiaceae

Thuidium pellucida Hedw.—Elmira, low ground, on rotten log, 8 May 1893, 5009 (NY).

Thuidium recognitum (Hedw.) Lindb.—East Hill, on banks, 24 Apr 1893, 5007 ½ (NY).

LYCOPHYTA**Equisetaceae**

Equisetum arvense L.—[Orchid Glen], 14 May 1899, 1204 (ECH, BH, BUF, US); Ashland, river banks, 28 May 1882, s.n. (BUF); Harrington's Island, 30 Apr 1888, s.n. (BUF?); Lowman's Swamp, 4 May 1879, *Cat. no. 3647* (BUF?); Ashland, May 1879, s.n. (BUF?); Lowman's Swamp, 4 May 1880, *Cat. no. 3647* (BUF); Pine City, Christian Hollow, 25 Apr 1895, s.n. (BUF); Ashland, 14 May 1882, 664 (ECH).

Equisetum fluviatile L.—[**syn: Esquisetum limosum L.**] Pine Valley Pond, 4 Jun 1899, 1238 (ECH, BH, BUF, US).

Equisetum hyemale L.—Chemung, Lowman's Swamp, 20 Apr 1880, *Cat. no. 3657* (BUF); Elmira, near Rorick's Glen, 20 Jun 1886, 9545 (BUF); Lowman's Swamp, 28 Apr 1882, *Cat. no. 3657* (BUF?); Lowman's Swamp, Apr 1880, s.n. (BKL).

Equisetum hyemale L. var. *affine* (Engelm.) Stone—[**syn: Equisetum hyemale L.**] near Rorick's Glen, wet banks, 20 Jun 1886, 750 (ECH).

Equisetum sylvaticum L.—no location, 28 May 1871, *Cat. no. 3650* (BUF?); Lowman's Swamp, 13 Jul 1882, *Cat. no. 3650* (BUF); 12 mi up Mud Creek near Rutan's Farms, bog, 10 May 1896, s.n. (BUF); by Little Creek over East Hill, 6 Jun 1896, s.n. (ECH, BH, BUF, NY, US); Harrington's Island, 28 May 1872, 456 (ECH).

Lycopodiaceae

Huperzia lucidula (Michx.) Trev.—[**syn: Lycopodium lucidulum Michx.**] no location, Sep 1897, s.n. (BKL); near Tremain's, wooded swamp, 17 Sep 1894, s.n. (BUF); Greatsinger's Corner, swampy woods & in cold damp woods, 16 Sep 1897, s.n. (BUF, US); low woods on Baldwin Creek, cold damp woods, 16 Sep 1896, 649 (ECH).

Lycopodium clavatum L.—Greatsinger's and Jenkin's Woods, swampy woods on corner, 22 Apr 1897, s.n. (BH, BUF, US); Jenkin's Woods, Greatsinger's Corner, in low woods, 22 Apr 1897, 1072 (ECH).

Lycopodium complanatum L.—Jenkin's Woods, near Sullivan Hill, swampy woods, in woods and thickets, 22 Apr 1897, s.n. (ECH, BH, BUF, NY, US); Greatsinger's Corner, woods near "Trin," 30 Apr 1895, s.n. (BUF).

Lycopodium complanatum L. var. *flabelliforme* Fernald—Jenkin's Woods, Greatsinger's Corner, 22 Apr 1897, 830 (ECH).

Lycopodium dendroideum Michx.—[**syn: Lycopodium obscurum L. var. dendroideum Eaton in A. Gray**] Greatsinger's Corner, woods, 30 Apr 1895, s.n. (BUF, US); Sullivan Hill, 3 Jun 1896, s.n. (BUF, US); Sullivan Hill, 9 Jul 1882, s.n. (BUF, US); Jenkin's Woods & Sullivan Hill, moist woods low or elevated, 30 Apr 1895, 967 [p.p.] (ECH).

Lycopodium obscurum L.—Jenkin's Woods & Sullivan Hill, moist woods low or elevated, 30 Apr 1895, 967 [p.p.] (ECH).

Ophioglossaceae

Botrychium dissectum Spreng. var. *obliquum* (Muhl.) Clute—wooded knoll below Lowman near D.L.&W. railroad, 11 Sep 1898, 1164 (ECH).

Botrychium virginianum (L.) Sw.—Elmira, woods behind Water Cure Hill, 7 Jul 1892, 9558 (BUF); Elmira, in woods, 7 Jun 1897, s.n. (BUF, US); woods over Water Cure Hill, rich woods, 7 Jul 1892, 488 (ECH).

Osmunda cinnamomea L.—1 mi above Greatsinger's Corner, 6 Jun 1879, *Cat. no. 3774* (BUF?); near Seeley Creek Bridge, 24 May 1896, s.n. (BUF?); Lowman's Swamp, swamps and low copses, 23 May 1880, 537 (ECH); no location, Jun 1897, s.n. (BKL); Sullivan Hill, in wet places, 12 Sep 1879, 537 (ECH).

Osmunda claytoniana L.—[near Lowman's Swamp], low wet soil, 4 Jun 1897, s.n. (BUF); Elmira, back of Upper Reservoir, woods, 29 May 1898, s.n. (BUF, US); Elmira, 24 May 1879, *Cat. no. 3773* (BUF); road to Breesport, swamps and moist soil, 8 Jun 1893, s.n. (BUF); Elmira, low grounds, swamps, 24 May 1879, 457 (ECH).

Osmunda regalis L.—Van Etten Swamp, 13 Jun 1899, 1266 (ECH, BH, BUF, US); Wellsburg Marsh, 6 Jul 1879, *Cat. no. 3772* (BUF, US); near Wellsburg swamp, 14 Jun 1889, s.n. (ECH, BH, BUF, MICH, MO, NY, US); in swamps & marshes, 24 Jun 1896, s.n.

Osmunda regalis L. var. *spectabilis* (Willd.) A. Gray—Swamp at Coffey Crossing railroad, swamps and wet woods, 12 Jun 1889, 973 (ECH).

PTEROPHYTA

Adiantaceae

Adiantum pedatum L.—Ashland, in woods, 13 Jul 1879, 357 (BUF); Pine City, up Dry Run, 11 Jun 1898, *s.n.* (BUF); woods over Water Cure Hill, rich moist woods, 7 Jul 1892, 357 (ECH).

Aspleniaceae

Asplenium acrostichoides Sw.—[**syn: Aspidium acrostichoides (Michx.) Kuntze**] Elmira, Hug Hollow, hilly woods, 8 Jun 1879, *Cat. no. 3738* (BUF); Elmira, Rorick's Glen, in rich damp woods, 27 Sep 1897, *s.n.* (BUF).

Asplenium cristatum Lam.—Lowman's Swamp, Jul 1880, *Cat. no. 3746* (BUF).

Asplenium ebenedes R. Scott—no location, no date, *s.n.* (ECH, BH, BUF, US).

Asplenium platyneuron (L.) B.S.P.—[**syn: Asplenium platyneuron (L.) Oakes**] Sullivan Hill, Elmira, rocky open woods, 15 Jun 1897, 789 (ECH).

Asplenium trichomanes L.—"Orchid Glen," on rocks, preferring Limestone, 22 Jun 1898, 1136 (ECH).

Polystichum acrostichoides (Michx.) Schott—[**syn: Aspidium acrostichoides (Michx.) Kuntze**] [near Water Cure Hill], in rocky woods, 7 Jul 1892, 521 (ECH).

Dennstaedtiaceae

Adectum pilosiusculum (Willd.) Link.—[**syn: Dicksonia pilosiuscula Willd.**] Elmira, at Rorick's Glen, 17 Sep 1897, *s.n.* (BUF, US).

Dennstaedia punctilobula (Michx.) T. Moore—[**syn: Dicksonia punctilobula (Michx.) A. Gray**] Mudlick, Sagetown, open wooded hillside, 7 Sep 1884, 918 (ECH); open wooded hillside above Rorick's Glen, moist, generally in open wooded hillside, 17 Sep 1897, 918a (ECH).

Dryopteridaceae

Cystopteris fragilis (L.) Bernh.—on rocks at Wellsburg, shaded cliffs and rocky woods, 5 Jun 1879, 748 (ECH).

Diplazium pycnocarpon (Spreng.) M. Broun—[**syn: Asplenium angustifolium Michx.**] woods near Van Etten's Swamp, in moist woods and shaded ravines, 13 Jun 1899, 1268 (ECH).

Dryopteris carthusiana (Vill.) H.P. Fuchs—[**syn: Aspidium spinulosum Sw.**] Baldwin, Hammond's Corners, 26 May 1880, *s.n.* (BH, BUF, US).

Dryopteris cristata (L.) A. Gray—[**syn: Aspidium cristatum (L.) Sw.**] Baldwin, Greatsinger's Swamp, 12 Sep 1882, *s.n.* (BUF, US); swamp on Baldwin Creek, swamps and wet woods, Jul 1880, 872 (ECH).

Dryopteris expansa (C. Presl) Fraser-Jenkin & Jermy—[**syn: Aspidium spinulosum Sw. var. dilatatum Link., Dryopteris spinulosa (L.) Kuntze var. ditatata (Hoffm.) Underw.**] no location, 25 May 1879, *s.n.* (BH, BUF, US); Lowman's Swamp, 22 Sep 1897, *s.n.* (BUF); Lowman's Swamp, 30 May 1884, *s.n.* (BUF, US); near Greatsinger's Corner, swampy woods, 8 Jun 1894, *s.n.* (BUF, US); Lowman's Swamp, in rich low moist woods, 22 Sep 1897, 1131 (ECH).

Dryopteris goldieana (Hook.) A. Gray—E of Van Etten, old woods, 13 Jun 1899, 1263 (BUF, US); Van Etten, in rich woods, 3 Aug 1898, 321 (ECH).

Dryopteris hexagonoptera (Michx.) Christens—[**syn: Phegopteris hexagonoptera (Michx.) Fee**] [Rorick's Glen], in dry woods, hillside, 17 Sep 1897, *s.n.* (ECH, BH, BUF, US); very open woods above Rorick's Glen, in dry woods and on hillside, 17 Sep 1897, 1130 (ECH).

Dryopteris intermedia (Muhl. ex Willd.) A. Gray—[**syn: Aspidium spinulosum Sw. intermedium D.C. Eaton**] Horseheads, up Latty Brook, in damp old woods, 27 Sep 1897, *s.n.* (BUF, US);

Pine City, up Dry Run, beechwoods, 8 Sep 1897, *s.n.* (BUF); Chemung, Lowman's Swamp, Jul 1879, *Cat. no. 3756* (BUF); Baldwin, Hammond's Corners, 6 Jun 1879, 3745 *var. 2* (BUF); Lowman's Swamp, frequent in shade, 28 Aug 1888, *s.n.* (ECH, BH, BUF, NY, US); Lowman's Swamp, woods, 28 Aug 1888, 971 (ECH).

Dryopteris marginalis (L.) A. Gray—[**syn: Thelypteris marginalis (L.) A. Gray**] Lowman's Swamp, rocky hillside in rich woods, 6 Jul 1880, 693 (ECH).

Gymnocarpium dryopteris (L.) Newman—[**syn: Phegopteris dryopteris (L.) Fée**] Hammond's Corner, rocky woods, 7 Jun 1882, 687 (ECH).

Matteuccia struthiopteris (L.) Todaro—[**syn: Onocleastruthiopteris (L.) Hoffm.**] Harrington's Island, alluvial soil only, 20 Aug 1897, 783 (ECH); Harrington's Island, on alluvial, along streams, 9 Aug 1885, *s.n.* (BUF).

Onoclea sensibilis L.—Lowman's Swamp, moist meadows and thickets, 1 Aug 1880, 538 [p.p.] (ECH); in moist places, 12 Aug 1897, *Cat. no. 3754* (BUF?); Pine City, up Dry Run, 11 Jun 1898, *s.n.* (ECH, BH, BUF, US); Chemung, Lowman's Swamp, in moist places, 1 Aug 1880, *Cat. no. 3754* (BUF).

Polypodiaceae

Polypodium vulgare L.—Chemung, Chemung Narrows, 23 Apr 1880, *Cat. no. 3662* (BUF); Elmira, crest of Mt Zoar, 12 May 1897, *s.n.* (BUF, US).

Pteris aquilina L.—Ashland, Fruit Homestead, 17 Aug 1879, *Cat. no. 3705* (BH, BUF, US); upland wood on East Hill, thickets, hillside, 24 Jun 1895, 617 (ECH).

Thelypteridaceae

Thelypteris noveboracensis (L.) Nieuwl.—[**syn: Aspidium noveboracensis Sw., Dryopteris noveboracensis (L.) A. Gray**] Horseheads, Newtown Creek, 14 Jun 1879, *s.n.* (BUF, US); Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF); Lowman's Swamp, 22 Sep 1897, *s.n.* (ECH, BH, BUF, MO, US); up Latty Brook Road, in rich moist woods, low or upland, 27 Sep 1897, 686 (ECH).

Thelypteris palustris Schott var. *pubescens* (G. Lawson) Fernald—[**syn: Aspidium thelypteris (L.) A. Gray**] Lowman's Swamp, in wet woods, 22 Sep 1897, *s.n.* (BH, BUF, US); Newfield, Nov 1895, *s.n.* (BUF?); in wet woods, 22 Sep 1897, *s.n.* (BH, BUF, US); Horseheads, Newtown Creek, 2 Sep 1885, *s.n.* (BUF); Newtown Creek, Horseheads, marshes and wet woods, 2 Sep 1885, 805 (ECH).

Woodsiaceae

Athyrium felix-femina (L.) Roth. subsp. *angustum* (Willd.) R.T. Clausen—[**syn: Athyrium angustum (Willd.) Presl**] Chemung, 18 Jul 1880, *s.n.* (BUF).

Athyrium felix-femina (L.) Roth.—[**syn: Athyrium felix-foemina (L.) Roth., Athyrium angustum (Willd.) C. Presl**] Sagetown, Mudlick Creek, 7 Sep 1884, *s.n.* (BUF); Lowman's Swamp, 6 Jul 1879, *Cat. no. 3731* (ECH, BH, BUF, MO, NY, US); Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF, US); Hendy Creek, 26 Jul 1892, 9965 (BUF); Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF, US); moist upland wood up Latty Brook Road, moist woods, thickets, fences, 27 Sep 1897, 714 (ECH).

Cystopteris fragilis (L.) Bernh.—Wellsburg, 5 Jun 1879, *Cat. no. 3755* (BUF).

Diplazium pycnocarpon (Spreng.) Tidest.—[**syn: Aspidium angustifolium Willd.**] near Van Etten, old woods 1 mi E of village, 13 Jun 1899, 1268 (BUF).

Woodwardia areolata (L.) Moore—Lowman's Swamp, moist meadows and thickets, 1 Aug 1880 538 [p.p.] (ECH).

ANTHOPHYTA

Acanthaceae

Phrymylepto stachya L.—Horseheads, moist and often low woods, frequent, 20 Jul 1885, 713 (ECH).

Aceraceae

Acer pensylvanicum L.—Wellsburg, Jul 1897, *s.n.* (BKL); Mt Zoar Hill, ravines and, cold woods, frequent, 23 May 1884, 454a (ECH); Mt Zoar Hill, ravines and cold woods, frequent, 28 Jul 1892, 454 (ECH)

Acer rubrum L.—Valley of the Chemung, fruiting 8 May 1887, 1 May 1887, 258 (ECH).

Acer saccharinum L.—[**syn: Acer dasycarpum Ehrh.**] along the Chemung River, river banks, 25 Jun 1882, 755 (ECH); Valley of the Chemung, almost restricted to the banks of the Chemung River, no date, 755a (ECH); Sullivan Hill, 28 May 1882, 756 (ECH); upland woods, in moist woods and ravines, frequent, 1 May 1898, 756a (ECH).

Acer saccharum Marsh.—Elmira, May 1896, *s.n.* (BKL).

Acer saccharinum L. var. *nigrum* (F. Michx.) Torr. & A. Gray—Lowman's Swamp, 11 May 1887, 820 (ECH).

Acer spicatum Lam.—over West Hill, moist woods along shaded creek, frequent, 20 Jun 1886, 710 (ECH); over West Hill, along creek, in cool shaded woods and ravines, frequent, 3 Jun 1886, 710 (ECH).

Alismaceae

Alisma plantago-aquatica L.—Lowman's Swamp, shallow water and ditches, common, 1 Aug 1880, 615 (ECH).

Sagittaria latifolia Willd.—[**syn: Sagittaria variabilis Engelm. ex A. Gray var. latifolia Engelm.**] near Riverside Park, 19 Jul 1898, 2743 (BUF); Fitches Bridge, 10 Aug 1888, *s.n.* (ECH); Ashland, 11 Aug 1879, *Cat. no.* 2743 (BUF); near Riverside Park, Elmira, buttonwoods, in shallow water and mud, 14 Jul 1898, 106 (ECH); edge of Brick Pond, [Elmira] City, shallow water and mud, 16 Aug 1899, 1323 (ECH).

Sagittaria rigida Pursh.—[**syn: Sagittaria variabilis Engelm. ex A. Gray var. angustifolia Engelm., Sagittaria heterophylla Pursh, Sagittaria rigida var. elliptica (Engelm.) Fernald**] Elmira City, marsh near Wooden Mill, 8 Aug 1892, 106 (ECH); Elmira, edge of old Brick Pond, 16 Aug 1899, 1323 (ECH, BH, BUF, MO, NY, US); Elmira, edge of Old Brick Pond, 16 Aug 1899, 1324 (ECH, BH, BUF, NY, US); Chemung, Lowman's Cove, 3 Jul 1880, 2745 (BUF, US); near Riverside Park, 19 Jul 1898, *s.n.* (ECH, BH, BUF, US); near Riverside Park, Elmira, muddy wet swale, 17 Jul 1898, 904 (ECH).

Amaranthaceae

Amaranthus albus L.—Horseheads, roadside, cross roads, 2 Sep 1896, *s.n.* (ECH, BUF, US); Cobble Hill, 3 Sep 1899, 1344 (BUF); Horseheads, on the streets, moist grounds, common, 2 Sep 1896, 1069 (ECH).

Amaranthus cruentus L.—[**syn: Amaranthus hybridus L. var. paniculatus Uline & W.L. Bray**] Elmira, garden, 19 Jul 1899, 1301 (BH, BUF, US).

Amaranthus hybridus L.—Elmira, garden & moist grounds, 4 Sep 1899, 1355 (ECH, BH, BUF, NY, US).

Hypoxis hirsuta L.—[**syn: Hypoxis erecta L.**] Carpinus? Wayback, Ashland, meadows and open woods, frequent, 3 Jun 1896, 324 (ECH).

Anacardiaceae

Cotinus obovatus Raf.—[**syn: Rhus cortinoides Nutt.**] Red House, cultivated, 4 Jun 1884, *s.n.* (BUF).

Rhus aromatica Aiton—Ashland, Fruit Homestead, 11 May 1879, 449

(BUF); run along Mountain House along Red School House, 6 May 1896, *Cat. no.* 668b (BUF).

Rhus aromatica Aiton subsp. *aromatica*—[**syn: Rhus canadensis Marshall**] crossroad from West Hill Road, 16 Jun 1895, 668b (BUF); Sullivan Hill, 11 May 1882, 668 (ECH).

Rhus glabra L.—Ashland, along the Chemung River, 30 Jul 1882, *Cat. no.* 403a (BUF); Elmira, 28 Jun 1887, *Coll. no.* 403 (ECH).

Rhus typhina L.—Elmira, 28 Jun 1887, *s.n.* (BUF); Sullivan Hill, 7 Jul 1895, *Cat. no.* 510a (BUF); Ashland, Sullivan Hill, 13 Jul 1882, 442 (BUF); Elmira, 28 Jun 1887, 510 (ECH).

Toxicodendron pubescens Mill.—[**syn: Rhus toxicodendron L.**] Ashland, 15 Jun 1880, 447 (BUF); Elmira, 20 Jun 1887, *Coll. no.* 496 (ECH); Chemung Narrows, 12 Jul 1895, 496a (ECH).

Toxicodendron vernix (L.) Kuntze—[**syn: Rhus venenata DC.**], Tamarac Swamp near Lowe's Pond, 10 Jun 1887, 949 ½ (ECH).

Apiaceae

Angelica atropurpurea L.—along Chemung River, 3 Jul 1893, 512 (ECH).

Angelica hirsuta Muhl.—Mt Zoar Hill, elevated woods, dry soil, 28 Jul 1892, 745 (ECH).

Angelica sp.—[**syn: Archangelica regalis**] Van Etten Swamp, 13 Jun 1899, 1279 (BUF).

Angelica venenosa (Greenway) Fern.—[**syn: Angelica villosa (Walt.) B.S.P.**] Sullivan Hill, north side, 13 Sep 1895, 745a (ECH).

Carum carvi L.—over West Hill, 16 Jun 1895, 605 (ECH).

§ *Chaerophyllum procumbens* (L.) Crantz—(State: E; TNC: G5 SH) below Harrington's Ford, along the D.L.&W. railroad, 28 May 1880, 875 (BUF); Along D.L.&W. railroad, below Harrington Ford, only station, 28 May 1892, *Heller no.* 9032 (F); along D.L.&W. railroad, below Harrington Ford, 28 May 1892, *s.n.* (F); D.L.&W. railroad, Ashland, 28 May 1882, 875 (ECH).

Cicuta bulbifera L.—Elmira, Eldridge Lake, 25 Aug 1895, 4123 (BUF); Old Canal Bed, Elmira, 10 Sep 1893, 806 (ECH).

Cicuta maculata L.—Ashland, marshes and swamps, 9 Jul 1879, 188 (ECH).

Conium maculatum L.—near Seeley Creek Bridge, 2 Jul 1895, 507 (ECH); no location, 2 Jul 1896, *Heller no.* 9053 (F).

Cicuta maculata L. var. *angustifolia* Wats.—Rorick's Glen, 8 Jul 1887, 188 (ECH).

Cryptotaenia canadensis DC.—Elmira, garden, 20 Jun 1893, 650a (ECH); Harrington Island, 9 Aug 1885, 650 (ECH).

Daucus carota L.—Elmira, 10 Sep 1893, 595 (ECH).

Heracleum lanatum Michx.—along Chemung River, 21 Jun 1882, *Coll. no.* 513 (ECH).

Hydrocotyle americana L.—Wilks Jenkins Swamp, Elmira, 25 Jul 1880, 808 (ECH).

Osmorhiza aristata (Thunb.) Rydb. var. *brevistylis* (DC.) B. Boivin—[**syn: Osmorhiza brevistylis DC.**] D.L.&W. railroad above Industrial grounds, woods right hand side of road, 5 Jun 1894, *s.n.* (BUF); Mt Zoar Hill, 7 Jun 1893, *Coll. no.* 331a (ECH); Elmira, garden, 20 Jun 1893, *Coll. no.* 331 (ECH).

Osmorhiza longistylis DC.—between Horseheads & Elmira, 5 Jun 1894, *Coll. No.* 463 (ECH).

Pastinaca sativa L.—Ashland, opposite Fruit Homestead, Chemung River, 14 Jul 1897, *s.n.* (BUF); near Elmira, roadside, 14 Jul 1897, 720a (ECH); East Hill, near Elmira, roadside, 24 Jun 1895, 720 (ECH).

Pimpinella integerrima (DC.) Benth. & Hook. f.—Elmira, Mt Zoar Hill, 26 Jul 1895, *s.n.* (BUF); Mt Zoar Hill, rocky hillsides, woodlands, 7 Jun 1893, *Coll. no.* 651 (ECH); Cobble Hill, Chemung Valley, 12 Aug 1892, *Coll. no.* 651 (ECH).

Sanicula marylandica L.—[**syn: Sanicula marylandica L., Sanicula marylandica L. var. canadensis Torr.**] Valley of the Chemung, ravine & rich woods, 20 Jun 1886, 689 (ECH); Chemung River,

Ashland, 21 Jun 1882, 847 (ECH); Cobble Hill, Ashland, 12 Aug 1892, 689a (ECH).

Sium suave Walt.—[syn, **Sium cicutaefolium** Gmel.] 7th Ward, marsh, 8 Aug 1892, 746 (ECH).

Thaspium barbinode (Michx.) Nutt.—above Carr's Corner, woods, 21 Jun 1896, s.n. (BUF); Elmira, Mt Zoar Hill, woods, 13 Jun 1897, s.n. (BUF); Elmira, Mt Zoar Hill, 26 Jul 1895, s.n. (BUF, US); Mt Zoar Hill, woods, 26 Jul 1895, 690a (ECH); Big Island, Chemung Valley, fruiting, 18 Jul 1884, 21 May 1887, 690 (ECH).

Zizia aptera (A. Gray) Fernald—[syn: **Zizia cordata** W.D.J. Koch ex DC.] Mt Zoar Hill, upland rocky woods, 26 Jul 1895, 244a (ECH).

Zizia aurea (L.) Koch—Elmira, above fairgrounds, woods, 5 Jun 1894, s.n. (ECH, BH, BUF, MICH, MO, NY, NYS, US); Elmira, Rorick's Glen, 7 Jun 1888, s.n. (BUF); Big Island, 21 May 1887, Coll. no. 1001 (ECH).

Indet.—on Seeley Creek, 28 May 1899, 1226 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Pine City, Dry Run, 11 Jun 1898, s.n. (BUF).

Apocynaceae

Apocynum androsaemifolium L.—Ashland, 20 Jul 1887, s.n. (BUF); Sullivan Hill, 9 Jul 1882, 2264 (BUF, US); Ashland, Fruit Homestead, Sullivan Hill, 9 Jun 1880, 2264 (BUF, US); opposite Theo. Henry, 7 Jul 1889, s.n. (BUF, US); Ashland, borders of thickets, frequent, 20 Jul 1887, 194 (ECH).

Apocynum cannabinum L.—Chemung River, 12 Aug 1897, s.n. (BUF); near Harrington's Ford, 3 Jul 1893, s.n. (BUF, US); Chemung River, moist ground along river, common, 25 Jun 1882, 344 (ECH).

Aquifoliaceae

Ilex verticillata (L.) A. Gray—Southport, Jun 1894, s.n. (BKL); Lowman's Swamp, low grounds, swamp, 13 Jul 1882, 794 (ECH); Lowman's Swamp, in swamp, 12 Sep 1897, 794 (ECH).

Araceae

Acorus calamus L.—Old People's Home, marsh, 4 Jun 1899, 1242 (ECH, BH, BUF, US); Elmira, marsh, 2 Aug 1897, s.n. (BH, BUF, US); Baldwin Creek, 19 Jul 1896, s.n. (BUF); Elmira, near Eldridge Lake, 21 Jun 1884, s.n. (BH, BUF, US); Seales' Farm, 15 Jun 1897, s.n. (BUF); near Eldridge Lake, Elmira, margins of rivulets, 21 Jun 1884, 843 (ECH); near Old People's Home, Elmira, in swamp and along streams, 2 Aug 1897, 843 (ECH).

Arisaema dracontium Schott.—Chemung River, Ashland, river banks, 15 Jun 1880, 835 (ECH).

Arisaema triphyllum (L.) Schott ex Schott & Endl.—Horseheads, 3 Jun 1893, s.n. (BUF); Lowman's Swamp, 30 May 1884, s.n. (BUF); near Breesport, 8 Jun 1893, s.n. (BUF, US); Lowman's Swamp, 3 Jun 1880, s.n. (BUF, US); Indian Tnpk, Horseheads, rich woods, frequent, 3 Jun 1893, 319 (ECH).

Calla palustris L.—Van Etten Swamp, 13 Jun 1899, 1278 (ECH, BH, BUF, US); Van Etten's Swamp, 13 Jun 1899, 1278 (ECH).

Symplocarpus foetidus (L.) Salisb. ex Nutt.—[syn: **Spathyema foetida** (L.) Raf.] Botany Swamp, Elmira, fruiting 6 May 1895, 21 Apr 1895, 562 (ECH).

Araliaceae

Aralia nudicaulis L.—Mt Zoar Hill, 7 Jun 1893, 485a (ECH); Hendy Creek, 24 May 1887, 485 (ECH)

Aralia racemosa L.—Hug Hollow Ravine, Elmira, 19 Aug 1879, 269 (ECH).

* *Panax quinquefolium* L.—[syn: **Aralia quinquefolia** (L.) Decne. & Planch.]; NY Rarities - C3; near Wynkoop Creek, 4 Sep 1880, 791 (ECH).

Panax trifolium L.—[syn: **Aralia trifolia** (L.) Decne. & Planch.], Lowman's Swamp, 8 May 1897, Heller no. 8984 (NY); Lowman's Swamp, 8 May 1880, Cat. No. 479 (ECH).

Aristolochiaceae

Asarum canadense L.—Greatsinger's Corner, swamp, 6 Jun 1879, Cat. no. 2325 (BUF, US); Far Rockaway, 13 May 1900, 1387 (BH, BUF, US); Greatsinger's Corner, swampy woods, 28 Apr 1896, s.n. (BUF, US); Breesport, near, 8 Jun 1893, s.n. (BH, BUF, US); Jenkin's Woods, 9 May 1898, s.n. (BUF, US).

Asclepiadaceae

Asclepia sexaltata L.—[syn: **Asclepias phytolaccoides** Pursh], Wilkes, swamp, 25 Jul 1880, Cat. no. 2284 (?); Wilkes Swamp, 25 Jun 1880, 2284 (?); Chemung, 29 Jun 1880, Cat. no. 2284 (BUF, US); Ravine of Old Mountain House, 5 Aug 1896, 655a, (ECH); over East Hill, 1889, 655 (ECH).

Asclepia sincamata L.—Newtown Creek, fruiting 16 Aug 1885, 20 Jul 1884, 105 (ECH).

Asclepias quadrifolia Jacq.—over East Hill, woods, above road, 27 Jun 1894, s.n. (BUF, US); Sullivan Hill, 29 Jun 1882, Cat. no. 2286 (BH, BUF, US); Ashland, Fruit Homestead, Sullivan Hill, 17 Jun 1879, 2286 (BUF, US); Sullivan Hill, 29 Jun 1882, 145 (ECH); Sullivan Hill, woods, 1 Aug 1896, s.n. (ECH).

Asclepias syriaca L.—[syn: **Asclepias cornuti** Decne.] no location, 20 Jul 1885, s.n. (BUF, US); Big Flats, 8 Jul 1888, 114 (ECH).

Asclepias tuberosa L.—Chemung, 29 Jun 1880, 2290 (BUF, US); near Sam Everetts, 26 Jun 1880, Cat. no. 2290 (ECH, BH, BUF, MICH, MO, NY, US); valley road above Horseheads, 31 Aug 1898, 469a (ECH); Town of Chemung, 26 Jun 1880, 469 (ECH).

Asclepias sp.—above Horseheads, 7 Jul 1898, s.n. (BUF, US); Ashland, opposite Fruit Homestead, 14 Jul 1897, s.n. (BUF, US); near Riverside Park, 19 Jul 1898, s.n. (BUF); Big Flats, river above Red School House, 5 Aug 1896, s.n. (BUF).

Indet.—no location, 16 Aug 1885, s.n. (?); Horseheads, Newtown Creek, 20 Jul 1884, s.n. (BUF, US).

Balsaminaceae

Impatiens capensis Meerb.—[syn: **Impatiens fulva** Nutt.] no location, 17 Aug 1897, Heller no. 7891 (F); no location, 12 Aug 1892, Heller no. 7892 (F); East of Elmira, 1892, 130 (ECH).

Impatiens pallida Nutt.—Wellsburg Narrows, 13 Aug 1882, 116 (ECH).

Betulaceae

Alnus incana (L.) Moench—Elmira, Old Canal, 14 Sep 1897, 2618 (?); Old Canal, E of Elmira, wet soil & on streams, 7 Apr 1897, s.n. (BUF); Ashland, 25 Mar 1880, 2618 (?); Elmira, Old Canal, east of city, 7 Apr 1897, s.n. (BUF); Southport, fruiting 14 Sept 1897, 11 Apr 1888, 719 (ECH).

Alnus incana (L.) Moench subsp. *rugosa* (Du Roi) Clausen—[Old Canal, E of Elmira], wet soil & on streams, 7 Apr 1897, Heller no. 3235 (F); [Old Canal, E of Elmira], wet soil & on streams, 7 Apr 1897, Pat. no. 9673 (WIS).

Betula alleghaniensis Britton—[syn: **Betula lutea** Michx. f.] near Rorick's Glen, 11 May 1888, s.n. (BUF); Lowman's Swamp, in cold soil, 11 May 1887, 7571 (BUF, US).

Betula lenta L.—near Rorick's Glen, tree with top branches near brook, 11 May 1888, s.n. (ECH, BH, BUF, US); near Pickaway, 13 May 1900, 1392 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Old Mountain House, 6 May 1895, s.n. (BUF); Erin, 16 May 1880, Cat. no. 2610 (BUF); Elmira, Mt Zoar, 2 May 1886, Cat. no. 2610 (?); Mt Zoar Hill, fruiting 14 Jul 1893, 2 May 1886, Coll. no. 453a (ECH).

Betula nigra L.—Lowman's Swamp, 8 May 1897, Cat. No. 2614 (?); Hendy Creek, 24 May 1887, s.n. (BUF); Lowman's Swamp, 25 May 1882, Cat. no. 2614 (BUF).

Betula papyrifera Marsh.—Elmira, Mt Zoar Hill, 12 Jun 1887, s.n. (BUF); Elmira, Mt Zoar Hill, 2 May 18[], 2613 (BUF); near Pickaway, 13 May 1900, 1394 (ECH, BH, BUF, MICH, MO, NY, NYS,

- US); Elmira, Mt Zoar Hill, northern slopes of hill, 13 May 1894, *s.n.* (?); Mt Zoar Hill, fruiting 12 Jun 1887, 2 May 1887, 259 (ECH). *Betula populifolia* Marsh.—Elmira, near Reformatory, 7 Jul 1898, *s.n.* (BUF, US); Elmira, cultivated, 7 Jul 1898, 1141 (ECH). *Betula* sp.—Elmira, 17 May 1879, 2604 (BUF).
- Carpinus caroliniana* Walt.—Jenkin's Woods, rich, moist woods, 9 May 1898, 576 (BH, BUF, US); Lowman's Swamp, 4 Jun 1897, *s.n.* (BUF); Coleman's Glen, fruiting 20 Jun 1886, 8 May 1887, 633 (ECH).
- Carpinus caroliniana* Walt. subsp. *caroliniana*—[**syn.: Carpinus americana Michx.**] Ashland, Baldwin Creek, 31 May 1880, *Cat. no.* 2604 (BUF); Lowman's Swamp, 3 May 1880, *Cat. no.* 2604 (?); Coleman's Glen, 8 May 1887, *s.n.* (BUF).
- Corylus americana* Walt.—Elmira, Valley of the Chemung, 1 Jul 1879, *Cat. no.* 2601 (BUF); Cobble Hill, 12 Aug 1892, *s.n.* (BUF); Elmira, left side of hill this side of Rutan's, Mt Zoar Road, 11 Apr 1888, *s.n.* (BUF); Elmira, over Water Cure Hill, 17 Apr 1893, *s.n.* (BUF); Mt Zoar Hill, fruiting 6 Jul 1884, 11 Apr 1888, 498 (ECH).
- Corylus cornuta* Marsh. subsp. *cornuta*—[**syn.: Corylus rostrata Aiton**] Elmira, over Water Cure Hill, 17 Apr 1893, *s.n.* (?); Elmira, over Water Cure Hill, 23 Jun 1893, *s.n.* (?); over East Hill, 24 Jun 1895, *s.n.* (BUF); Southport, run near Mt Zoar Hill, 11 Apr 1888, *s.n.* (BH, BUF, US); Baldwin Creek, 18 Apr 1880, *s.n.* (BUF); Hendy Creek, 12 Jul 1866, *s.n.* (BUF); East Hill, fruiting 24 Jun 1895, 18 Apr 1880, 661 (ECH); Mt Zoar Hill, near Rorick's Glen, 20 Jun 1886, 2602 (?).
- Ostrya virginiana* (Mill.) Koch.—East Hill, Elmira, fruiting 1 Aug 1880, 28 Apr 1880, *Coll. no.* 576 (ECH).
- Bignoniaceae**
- Catalpa speciosa* (Warder) Engelm.—no location, 19 Jun 1887, *s.n.* (ECH).
- Boraginaceae**
- Anchusa arvensis* (L.) Bieb.—[**syn: Lycopsis arvensis L.**] Eldridge Lake, Elmira, 24 Jun 1889, 974 (ECH).
- Buglossoides arvensis* (L.) I.M. Johnst.—[**syn: Lithospermum arvense L.**] Elmira, foot of East Hill, 2 May 1899, 1193 (ECH, BH, BUF, NY, MO, US); Ashland, May 1879, *s.n.* (BKL); Searles Farm, Ashland, 1 Jun 1882, 519 (ECH).
- Cynoglossum officinale* L.—Veteran, moist low woods, roadside, 7 Jun 1897, *s.n.* (BUF, US); East Elmira, 28 May 1887, 56 (ECH).
- Echium vulgare* L.—along North Chemung railroad, above shops, 20 Aug 1897, *s.n.* (BUF, US); along N. C. Railroad, above shops, 19 Aug 1897, 1118 (ECH).
- Hackelia virginiana* (L.) I.M. Johnst.—[**syn: Echinosperrum virginicum (L.) Lehm.**] Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF, US); Big Flats, Sullivan Hill, above No.6 School House, 1 Aug 1896, *s.n.* (ECH, BH, BUF, US); Big Flats, Sullivan Hill, above No.6 School House, up run, 9 Aug 1898, *s.n.* (?); Mt Zoar Hill, 10 Jul 1892, 593 (ECH).
- Mertensia virginica* (L.) Pers. ex Link.—Elmira, garden, 6 May 1894, 2109 (BUF, US); Elmira, Rorick's Glen, 11 May 1888, *s.n.* (BUF); Ashland, 5 May 1880, 2109 (BUF); Ashland, along the Chemung River, in shade, 5 May 1880, 5856 (BUF, US); [near Mountain House], 6 May 1896, *s.n.* (BUF, US); no location, 10 Jun 1897, *s.n.* (BUF); Ashland, 21 May 1882, *s.n.* (BUF); along streams, 15 May 1899, 1202 (ECH, BH, BUF, NY, US); no location, May 1894, *s.n.* (BKL); along the Chemung River, 10 Jun 1897, 1202 (RM, F); Chemung River, Ashland, 5 May 1880, 542 (ECH).
- Myosotis laxa* Lehm.—East Elmira, along Old Canal, 7 Jul 1882, 11 (ECH); no location, 31 May 1897, *s.n.* (F); [near Water Cure Hill], 7 Jul 1892, *Pat. no.* 7603 (F); Hendy Creek, low moist ground, 15 Jun 1896, *Pat. no.* 7603 (WIS).
- Onosmodium carolinianum* (Lam.) A. DC.—Ashland, 7 Jul 1882, 716 (ECH).
- Onosmodium molle* Michx. var. *hispidissimum* (Mack.) Cronq.—Ashland, just below railroad crossing at Harrington's Ford, 18 Jul 1882, *Pat. no.* 7614 (NY).
- Symphythum officinale* L.—Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF, US); this side of Pine Valley, 15 Jul 1894, 271 (ECH).
- Brassicaceae**
- Arabis laevigata* (Muhl. ex Willd.) Poir.—Ashland, Chemung River, banks, 25 May 1979, *s.n.* (BUF).
- Arabis lyrata* L. var. *lyrata*—crest of Mt Zoar, 12 May 1897, 399 (NY); crest of Mt Zoar, 12 May 1897, 4922 (NY).
- § *Arabis shortii* (Fern.) Gleason—**State: E-3; TNC: G5 SH**; Chemung River bank, 29 May 1887, *s.n.* (BUF).
- Cardamine bulbosa* (Schreb. ex Muhl.) B.S.P.—[**syn: Cardamine rhomboidea DC.**] Lowman's Cove, 23 May 1882, 144 (BUF).
- Cardamine rhomboidea* DC.—Chemung River, river banks, 8 May 1896, *s.n.* (BUF).
- Hesperis matronalis* L.—between Pine Valley & Horseheads, 15 Jun 1894, *s.n.* (BUF).
- Nasturtium officinale* W.T. Aiton—[**syn: Roripa nasturtium L. Rby**] Miller's Pond, 5 Aug 1897, 614 (F, WIS); Miller's Pond, 5 Aug 1897, 5205 (F).
- Indet.—Ashland, 12 Jul 1882, *s.n.* (BUF).
- Campanulaceae**
- Campanula americana* L.—Old Mountain House Narrows, 9 Aug 1898, 401 (ECH).
- Campanula aparinoides* Pursh—near Elmira, near Riverside Park, 19 Jul 1898, *Cat. no.* 495b (BUF, US); Fitches Bridge, 21 Jul 1884, 495 (ECH).
- Campanula rapunculoides* L.—roadsides and fields, 3 Jul 1896, *Pat. no.* 6528 (US); on East Hill beyond Water Cure, 7 Jul 1889, 980 (ECH).
- Campanula rotundifolia* L.—Mt Zoar Hill, steep slopes, 8 Aug 1887, 1097 (ECH).
- Lobelia cardinalis* L.—Baldwin, Baldwin Creek, 21 Jul 1880, 164a (BUF); on Baldwin Creek above Lowman, 2 mi, 17 Aug 1897, 164b (BUF); Baldwin Creek, 31 Jul 1896, *Pat. no.* 6484 (US); Baldwin Creek, 21 Jul 1880, 164 (ECH).
- Lobelia inflata* L.—Lowman's Swamp, dry open fields, 28 Aug 1888, 127 (ECH).
- Lobelia siphilitica* L.—[near Pine Valley], moist places, 6 Sep 1898, *Heller no.* 12129 (F); between Elmira City & Pest House, low grounds, wet places, 10 Sep 1893, 131 (ECH).
- Lobelia spicata* Lam.—Ashland, Searles' Farm, 9 Jul 1882, *s.n.* (BUF); Ashland, Fruit Homestead, 21 Jun 1878, *Cat. no.* 1642 (BUF); near Seeley Creek EER Bridge, Southport, in grass, in dry mostly sandy soil, 24 Jun 1898, 77a (ECH).
- Triodanis perfoliata* (L.) Nieuwl.—[Sullivan Hill], 7 Jul 1895, *Pat. no.* 6543 (MIN).
- Triodanis perfoliata* (L.) Nieuwl. var. *perfoliata*—[**syn: Specularia perfoliata A. DC.**] Searles Farm, 7 Jul 1882, 491 (ECH).
- Indet.—Searles' Farm, 15 Jun 1897, 491b (BUF, US).
- Cannabiaceae**
- Cannabis sativa* L.—Ashland, Fruit Homestead, 14 Jul 1897, *s.n.* (ECH, BH, BUF, US); Ashland, fruiting 8 Aug 1880, 5 Jul 1880, 514 (ECH).
- Caprifoliaceae**
- Diervilla lonicera* Mill.—[**syn: Diervilla trifida Moench.**] banks along Old Canal, E Elmira, 23 Jun 1895, 46 (ECH).
- Linnaea borealis* L.—head of Christian Hollow, 30 May 1886, 43 (ECH).

Lonicera canadensis Bartr.—[**syn: *Lonicera ciliata* Muhl.**] Hendy Creek, rocky woods, 25 May 1887, 672 (ECH).

Lonicera dioica L.—[**syn: *Lonicera glauca* Hill.**] near Seeley Creek Bridge, 1884, 672 (ECH).

Lonicera sempervirens L.—near Pine Valley, 19 Jun 1897, *s.n.* (ECH).

Sambucus canadensis L.—Ashland, 3 Jul 1893, 374 (ECH).

Sambucus racemosus L.—Greatsinger's Swamp, 27 May 1882, 758 (ECH).

Symphoricarpos racemosus (Michx.) Pursh—Wellsburg, 9 Jun 1894, 52 (ECH).

Triosteum perfoliatum L.—Elmira, 29 Jun 1882, 654 (ECH); Latty Brook Road, slope just south, 2 Sep 1896, 654a (ECH).

Viburnum acerifolium L.—Sullivan Hill, cool rocky woods, 10 Jun 1882, 691 (ECH); Mt Zoar Hill, woods, 26 Jul 1895, 691 (ECH).

Viburnum dentatum L.—Pine Valley, 10 Jun 1899, 1260 (ECH).

Viburnum lantanoides Michx.—Elmira, May 1897, *s.n.* (BKL); Lowman's Swamp, 8 May 1884, 443 (ECH).

Viburnum lentago L.—Alfred Searles farm, Ashland, 16 Jun 1882, 565 (ECH).

Viburnum pubescens Pursh—Baldwin Creek, 7 Jun 1887, 684 (ECH); near Pine Valley, 4 Jun 1899, 1237 (ECH).

Caryophyllaceae

Agrostemma githago L.—[**syn: *Lychnis githago* (L.) Scop.**] Ashland, 1882, *s.n.* (ECH).

Arenaria serpyllifolia L.—[**syn: *Arenaria serpyllifolia* L. var. *tenuior* Koch.**] Ashland, sandy waste places, gardens, etc., 4 Jun 1882, 695 (ECH).

Cerastium fontanum Baumg. subsp. *vulgare*—[**syn: *Cerastium vulgatum* L.**] Lowman's Cove, fields and copses, infreq., 23 May 1894, 275 (ECH).

Cerastium nutans Raf.—[**syn: *Cerastium longipedunculatum* Muhl.**] Big Flats, west of Old Mountain House, small run in ravine, shaded places, 189_, 677(ECH).

Dianthus barbatus L.—near Pine Valley, in a deserted garden, 19 Jun 1897, 246 (ECH).

Lychnis chalcidonica L.—near Pine Valley, in deserted garden, 27 Jun 1896, 249 (ECH).

Lychnis githago (L.) Scop.—Ashland, in wheat fields, frequent, 25 Jun 1882, 39[] (ECH).

Lychnis sp.—near Greatsinger's Corner, roadside, 17 Jul 1896, *s.n.* (ECH); near Greatsinger's Corner, 1896, *s.n.* (ECH).

Minuartia tenella (J. Gay) Mattf.—[**syn: *Arenaria stricta* Michx.**] entrance to Latty Brook road, steep hillside, 22 Jun 1897, 336 (ECH).

Paronychia canadensis (L.) Alph. Wood—[**syn: *Anychia canadensis* (L.) Britton, Sterns & Poggenb.**] Sullivan Hill, dry banks and open places, 8 Jul 1896, 765 (ECH).

Paronychia fastigiata (Raf.) Fern.—East Elmira, Jun 1880, *s.n.* (BKL).

Saponaria officinalis L.—near Tubb's Dam, roadside along streams, common, 21 Jun 1888, 115 (ECH).

Silene antirrhina L.—Ashland, in wheat field, dry soil, bank, etc., 12 Jun 1879, 692 (ECH).

Silene noctiflora L.—Elmira just beyond Tubb's Hill, cultivated grounds, roadsides, 13 Jun 1882, 284 (ECH).

Silene stellata W.T. Aiton—Sullivan Hill, Ashland, wooded slopes, ravines, 3 Aug 1879, 724 (ECH).

Spergula arvensis L.—8th Ward, cultivated grounds, fields & waste places, 3 Jul 1898, 428 (ECH).

Stellaria borealis Bigelow subsp. *borealis*—[**syn: *Alsine borealis* (Bigel.) Britton**] Baldwin, E of [? itt], 17 May 1880, 829 (ECH).

Stellaria graminea L.—[**syn: *Alsine graminea* (L.) Britton**] W of West Junction Station, ditches, field, roadside, 6 Jun 1898, 1134 (ECH).

Stellaria longifolia Muhl.—no location, 1888, 694 (ECH).

Stellaria media (L.) Vell.—[**syn: *Stellaria media* Smith**] Elmira City, in damp ground, 15 Aug 1888, 206 (ECH); Elmira, near Rorick's Glen, grassy wet places, swamps, 7 Jun 1888, 206 (ECH).

Celastraceae

Celastrus scandens L.—Horseheads, Latty Brook Road Hill, 22 Jun 1897, *s.n.* (BUF); Ashland, Chemung River, along streams and thickets, 21 Jun 1882, 1235 (BUF, ECH); Chemung Narrows, along streams and thickets, 25 Sep 1894, 773a (BUF, ECH); Hendy Creek road, 17 Jun 1894, *s.n.* (BUF); thickets, fruiting 25 Sept 1894, 22 Jun 1897, 7824 (F); Chemung Narrows, along streams & thickets, 25 Sep 1894, 773a (ECH); Ashland, along streams and thickets, rich soil, 21 Jun 1882, 773 (ECH).

Chenopodiaceae

Chenopodium album L.—Cobble Hill, 3 Sep 1899, 1343 (BUF); Elmira, gardens, 18 Jul 1890, 304 (ECH).

Chenopodium botrys L.—5th Ward, waste places, 15 Jul 1884, 976 (ECH, F).

Chenopodium gigantospermum Aellen—[**syn: *Chenopodium hybridum* L.**] Baldwin Creek, waste places, roadside, 12 Sep 1882, 782 (ECH).

Chenopodium hybridum L.—along Baldwin Creek, woods, 12 Sep 1882, *s.n.* (BUF, US); along Baldwin Creek, woods, 12 Sep 1892, *s.n.* (BUF, F).

Cistaceae

Crocantemum canadense (L.) Britt.—[**syn: *Helianthemum canadense* (L.) Michx.**] near Mountain House, Aug 1888, *s.n.* (BUF); just E of Old Mountain House, roadside, Aug 1888, *s.n.* (ECH).

Hudsonia tomentosa Nutt.—Tom's Ravine, near Lowman's [?], 28 Sep 1881, *s.n.* (BUF).

Lechea intermedia Legg. ex Britton—Elmira, rocky soil, 20 Aug 1896, *s.n.* (ECH, BH, BUF, US); East Hill, 20 Aug 1895, *s.n.* (BUF); over East Hill (stone quarry), on dry sterile soil, 20 Aug 1895, 1041 (ECH).

Lechea minor L.—[**syn: *Lechea thymifolia* Michx**] Southport, near old Mountain House, on dry soil, Aug 1888, *s.n.* (BUF).

Lechea sp.—Mountain House Narrows, 2 Aug 1896, 968 (?); near old Mountain House, dry rocky soil, 2 Sep 1897, 968 (ECH, BH, BUF, US).

Commelinaceae

Tradescantia virginiana L.—Pine Valley, derelict garden, 19 Jun 1897, 69a (BUF).

Compositae

Achillea millefolium L.—Elmira, garden, 2 Aug 1888, *s.n.* (BH, BUF, US); West Chemung, 18 Jul 1880, *Cat. no. 1530* (BUF); Horseheads, 6 Jul 1884, *Cat. no. 1530* (BUF); Horseheads, 6 Jul 1884, 66 (ECH).

Ageratina ageratoides (L.) R.M. King & H. Rob.—[**syn: *Eupatorium ageratoides* L.**] above Red School House, up river, 2 Aug 1896, 203b (?).

Ageratina altissima (L.) R.M. King & H. Rob.—[**syn: *Eupatorium ageratoides* L.**] Ashland, 7 Sep 1879, 1189 (BUF, US).

Ambrosia artemisiifolia L.—Elmira, 31 Aug 1883, 4081 (?); Elmira, garden, 1 Sep 1888, 555a (BUF); Elmira, garden, 17 Aug 1899, 1332 (ECH, BH, BUF, US); Elmira, 31 Aug 1883, 1404 (BUF); Elmira, garden, 1 Sep 1888, 555 (ECH); Elmira City, gardens and waste places, everywhere, common, 1 Sep 1888, 555 (ECH).

Ambrosia trifida L.—Elmira, Old Canal, along streams, 12 Aug 1897, *s.n.* (BUF); Elmira, 16 Aug 1899, 1328 (ECH, BH, BUF, US); Harrington Island, moist river banks, common, 3 Aug 1893, 1007 (ECH).

Anaphalis margaritacea (L.) Benth. & Hook. f.—Sullivan Hill, north side, dry hills and woods, 13 Sep 1895, 831 (ECH).

- Anaphalis margaritacea* (L.) Benth. & Hook. f. var. *margaritacea*—**[syn: *Antennaria margaritacea* (L.) R. Br. ex DC.]** Sullivan Hill, 6 Aug 1882, 1553 (?); Ashland, Fruit Homestead, Sullivan Hill, 17 Aug 1879, 1553 (BUF).
- Antennaria neoioica* Greene—Pickaway, 21 May 1899, s.n. (BH, BUF, US).
- Antennaria plantaginifolia* (L.) Hook.—Orchid Glen, dry woods, 14 May 1899, 1215 (BH, BUF, US); road to Horseheads, sterile knolls and banks, 23 May 1884, 225 (ECH).
- Anthemis cotula* L.—Elmira, Mt Zoar Rd, 20 Jul 1897, 1326 (BUF, US); Elmira, 16 Aug 1899, 1326 (BUF); Elmira, garden, common by roadsides, 5 Jul 1893, 277 (ECH).
- Arctium lappa* L.—Elmira, garden, 17 Aug 1899, 1339 (BH, BUF, US); Elmira, garden, 11 Sep 1893, s.n. (BUF).
- Arctium minus* (Hill) Bernh. var. *corymbosum* Wieg.—**[syn: *Arctium lappa* L.]** Elmira, garden, roadsides, 11 Sep 1893, 295 (ECH).
- Artemisia vulgaris* L.—Southport, switchyard, 19 Aug 1900, 1430 (ECH, BH, BUF, NY, US); Horseheads, up Latty Brook, 27 Sep 1897, s.n. (ECH, BH, BUF, NY, US); roadside just below [?] Latty Brook Road, 27 Sep 1897, 1124 (ECH)
- Aster salicifolium* Lam.—**[syn: *Aster paniculatus* Lam.; *Aster paniculatus* Lam. var. *bellidiflorus* (Willd.) Burgess]** Elmira, 11 Sep 1893, 1071 (BUF); over East Hill, roadside, 29 Sep 1896, 1071 (ECH); Elmira, garden, low moist soil, 19 Sep 1898, 1014a (ECH).
- Bidens cernua* L.—Ashland, wet ground, shores, ravines, 10 Sep 1882, 427 (ECH).
- Bidens connata* Muhl. ex Willd.—along the Old Canal, low wet ground, 10 Sep 1893, 894 (ECH).
- Bidens frondosa* L.—Elmira, gardens, 31 Aug 1883, 906 (ECH).
- Bidens laevis* (L.) B.S.P.—**[syn: *Bidens chrysanthemoides* Michx., *Heliopsis laevis* Pers.]** Elmira, 10 Sep 1893, 730 (?); along Newtown Creek, 10 Sep 1893, 730a (BUF); swamps and along streams, 10 Sep 1895, 730 (SEINet); East Elmira, swamps around ponds, 10 Sep 1893, 730 (ECH); Southport, alluvial soil, 11 Jul 1884, 492 (ECH).
- Bidens tripartita* L.—**[syn: *Bidens comosa* (A. Gray) Wiegand.]** no location, Sep 1897, s.n. (BKL); Elmira, in gardens, wet soil, 17 Aug 1896, 1127 (ECH).
- Cacalia atriplicifolia* L.—Wellsburg, side of railroad, but not seen since, Aug 1874, s.n. (?); along railroad at Wellsburg Narrows, 9 Aug 1874, s.n. (ECH).
- § *Cacalia suaveoleus* L.—**[State: E; TNC G3 S1]** Elmira, no date, s.n. (BUF).
- Carduus pumilus* Nutt.—**[syn: *Carduus odoratus* (Muhl.) Porter]** on bank about Hoffman Dist, Sullivan Hill, in fields, 17 Aug 1897, 772 (ECH).
- Chrysanthemum leucanthemum* L.—Elmira, garden, 26 Jul 1888, 63 (ECH).
- Cichorium intybus* L.—Elmira, streets of city, roadside, 6 Oct 1894, 620 (ECH).
- Cirsium arvensis* (L.) Scop.—**[syn: *Carduus arvensis* Hoffm.]** on road to N Chemung, in fields, waste places, 19 Jul 1896, 1060 (ECH); Chemung Narrows, cultivated fields, roadside, 12 Jul 1895, 209 (ECH).
- Cirsium discolor* (Muhl. ex Willd.) Spreng.—**[syn: *Carduus discolor* (Muhl. ex Willd.) Nutt.]** Cobble Hill, 21 Aug 1898, s.n. (BUF); Harrington's Island, 8 Sep 1891, s.n. (BUF); Harrington's Island, 8 Sep 1896, Pat. no. 5076 (WIS).
- Cirsium vulgare* (Savi) Ten.—**[syn: *Carduus lanceolatus* Hoffm., *Cnicus lanceolatus* (L.) Willd.]** field, 8 Sep 1891, s.n. (BUF); East Hill, 8 Aug 1895, s.n. (?); Hug Hollow, pastures and roadside, 5 Sep 1883, 208 (ECH).
- Cnicus muticum* Michx.—**[syn: *Cnicus muticus* (Michx.) Pursh]** Elmira, near Woodlawn Cemetery, swamp, 3 Oct 1896, s.n. (BUF); Elmira, 18 Sep 1887, 3990 (BUF); Elmira, swamps and low woods, 18 Sep 1887, 816 (ECH).
- Cnicus vulgare* (Savi) Ten.—**[syn: *Cnicus lanceolatus* (L.) Willd.]** Elmira, over East Hill, along road, 9 Oct 1893, Cat. no. 208 (BUF).
- Coryza canadensis* (L.) Cronquist—**[syn: *Erigeron canadensis* L.]** Elmira, 31 Aug 1883, 1280 (BUF); Sullivan Hill, 29 Jul 1895, s.n. (BUF); Elmira, 10 Aug 1883, 1280 (BUF, US); Elmira, garden, waste places, 4 Aug 1892, 556 (ECH).
- Coreopsis tinctoria* Nutt.—A. Searles Farm, Ashland, cultivated, sometimes escapes, 7 Jul 1880, s.n. (ECH).
- Doellingeria infirma* (Michx.) Greene—**[syn: *Aster infirmus* Michx.]** near Stone Quarry, woods near Mrs. Cranes, 30 Aug 1896, s.n. (BH, BUF, US); Sullivan Hill, 1 Aug 1896, s.n. (BUF); Sullivan Hill, dry woodland, 18 Jul 1895, 818 (ECH, BH, BUF, NY, US); Elmira, Mt Zoar Hill, 26 Jul 1895, s.n. (BUF); Mt Zoar Hill, woods, 10 Jul 1892, 818 (ECH).
- Erechtites hieracifolia* (L.) Raf. ex DC.—**[syn: *Erechtites hieracifolia* (L.) Raf. ex DC. var. *hieracifolia*]** mint woods near North Chemung, Jul 1896, s.n. ("S"); Baldwin, moist woods and recent clearings, 21 Aug 1882, 531 (ECH).
- Erigeron annuus* (L.) Pers.—Elmira, garden, 2 Jul 1896, Cat. no. 557a (BUF); Horseheads, up Latty Brook Road, 29 Aug 1897, s.n. (BUF); waste places, 2 Jul 1891, s.n. (ECH, BH, BUF, NY, US); Elmira, garden, 29 Jul 1893, 557 (ECH).
- Erigeron philadelphicus* L.—Southport, 11 Jun 1897, 698 (BUF, US); Harrington's Ford, moist grassy banks, 3 Jul 1893, 698 (ECH).
- Erigeron pulchellus* Michx.—**[syn: *Erigeron bellidifolius* Muhl. ex Willd.]** Baldwin Creek, 4 Jun 1880, Cat. no. 1283 (BUF, US); Elmira, near fairgrounds, woods, 4 Jun 1884, s.n. (ECH, BH, BUF, US); Sullivan Hill, 13 Jun 1886, s.n. (BUF); over East Hill, riverside by [illeg.] creek, 6 Jun 1896, s.n. (BUF); woods near Fair Grounds, 4 Jun 1884, 760 (ECH).
- Erigeron strigosus* Muhl. ex Willd.—Elmira, garden, 1 Oct 1898, s.n. (BUF, US); Elmira, garden, 28 Jul 1888, s.n. (BUF, US); Elmira, garden, 28 Jul 1888, 697 (ECH).
- Eupatorium maculatum* L.—Woodlawn Cemetery, Elmira, swamp near cemetery, 31 Oct 1896, 107 (ECH).
- Eupatorium perfoliatum* L.—Rorick's Glen, low ground, 3 Aug 1890, 423 (ECH).
- Eupatorium purpureum* L.—Rorick's Glen, low ground, 9 Aug 1887, 204 (ECH).
- Eupatorium rugosum* Houtt.—**[syn: *Eupatorium ageratiodes* L.]** Rorick's Glen, rich woods, 31 Aug 1890, 203 (ECH).
- Eurybia divaricata* (L.) G.L. Nesom—**[syn: *Aster corymbosus* Ait., *Aster divericatus* L.]** Baldwin, Baldwin Creek, Greatsinger's Swamp, 12 Sep 1882, Cat. no. 1236 (BUF, US); Horseheads, Latty Brook Road, 29 Aug 1897, s.n. (BUF); Lowman's Cove, 28 Aug 1888, s.n. (BUF, US); Elmira, Mt Zoar Hill, woods over hill, near [] in [], 18 Aug 1894, s.n. (ECH, BH, BUF, MICH, MO, NY, US); Lowman's Swamp, 1888, 286 (ECH).
- Eurybia macrophylla* (L.) Cass.—**[syn: *Aster macrophyllus* L.]** Baldwin, Cobble Hill, 12 Sep 1882, Cat. no. 1252 (BUF); Elmira, no date, s.n. (ECH, BH, BUF, MICH, MO, NY, US); Rorick's Glen, moist woods near brooks, 19 Aug 1888, 192 (ECH); N side of Sullivan Hill near base, 13 Sep 1895, 1045 (ECH).
- Euthamia graminifolia* (L.) Nutt.—**[syn: *Solidago lanceolata* L.]** East Hill, 28 Aug 1895, s.n. (BH, BUF, US); Big Flats, top of hill, end of run from Red School House, 5 Aug 1896, s.n. (BUF); East Hill, right side of road, a small patch growing up a damp level place, 20 Aug 1895, s.n. (BUF, US); East Hill Woods, river banks, moist soil, 20 Aug 1895, 1040 (ECH).
- Galinsoga parviflora* Cav.—ditch foot of Columbia St., Elmira, in clear ground & waste places, 28 Jun 1899, 1295 (ECH).
- Gnaphalium polycephalum* Michx.—[on Ridge Road above

- Horseheads], woods on ridge road, 16 Aug 1898, *s.n.* (ECH, BH, BUF, US); Ashland, Fruit Homestead, on dry warm soil, 3 Aug 1879, 1549 (BUF, US); Latty Brook Road, 29 Aug 1897, *s.n.* (?); Sullivan Hill, 1 Aug 1896, *s.n.* (BUF); E Sullivan Hill, old fields and dry woods, 6 Aug 1884, 422 (ECH).
- Gnaphalium uliginosum* L.—Harrington's Island, low moist ground, 26 Aug 1882, 93 (ECH).
- Helenium autumnale* L.—Harrington's Island, river banks, 4 Sep 1895, 426 (ECH).
- Helianthus decapetalus* L.—Ashland, Sullivan Hill, 21 Aug 1879, *s.n.* (BUF); Ashland, Harrington Island, 12 Aug 1879, 1445 (BUF); Big Island, 1 Sep 1888, 196b (BUF); Big Island, Chemung River, dry woods or ravines, 1 Sep 1888, 191 (ECH).
- Helianthus divaricatus* L.—Ashland, Cobble Hill, dry banks and woods, 12 Aug 1892, 864 (ECH).
- Helianthus strumosus* L.—Southport, river banks and low copses, 11 Sep 1888, 190 (ECH).
- Helianthus tuberosus* L.—Harrington Island, alluvial ground, moist soil, 4 Sep 1895, 744 (ECH).
- Hieracium aurantiacum* L.—no location, Jun 1894, *s.n.* (BKL); near Farm of Adan Krans, roadside and fields, 23 Jun 1893, 1137 (ECH).
- Hieracium canadense* Michx.—Baldwin Creek, dry woods, 7 Jul 1889, 430 (ECH).
- Hieracium scabrum* Michx.—near Tremain's, swampy woods, 6 Jul 1895, 1067 (BUF); Elmira, Aug 1896, *s.n.* (BKL); upland woods near Mrs. Cranes, above stone quarry, 30 Aug 1896, 1067 (ECH).
- Hieracium venosum* L.—Rorick's Glen, dry pine woods, 19 Aug 1888, 285 (ECH).
- Inula helenium* L.—Elmira, roadside and damp pastures, 20 Jul 1879, 516 (ECH).
- Lactuca biennis* (Moench) Fernald—near Fitches Bridge, borders of woods, 13 Aug 1887, 732 (ECH).
- Lactuca canadensis* L. var. *longifolia* (Muhl) Farw.—[**syn: Lactuca canadensis L.**] along Hendy Creek, rich damp soil, 26 Jul 1892, 777 (ECH); Elmira, near fairgrounds, woods, 24 Aug 1884, 777a (BUF).
- § *Lactuca floridana* (L.) Gaertn.—[**State: E; TNC: G5 SH**] Greatsinger's Corner, Jenkin's Woods, along roadside by the woods, 1 Aug 1876, *Cat. no. 732a* (BUF, US).
- Lactuca serriola* L.—[**syn: Lactuca scariola L.**] road to Horseheads, 11 Aug 1896, 1037a (BUF); 7th ward, industrial grounds, gardens, 28 Jul 1895, 1037 (BUF); Elmira Heights, waste places, 28 Jul 1895, 1037 (ECH).
- Liatris scariosa* (L.) Willd.—[**syn: Laciniaria scariosa (L.) Hill.**] Cobble Hill, Ashland, in dry soil, 21 Aug 1898, 1154 (ECH).
- Oclemena acuminata* (Michx.) Greene.—[**syn: Aster acuminatus Michx.**] [near Pine City], cool rich woods, 8 Sep 1897, 572 (ECH, BH, BUF, US); no location, Sep 1897, *s.n.* (BKL); under [bushes] up Dry River, moist woods, 3 Sep 1897, 572 (ECH); [near Pine City], 8 Sep 1897, *Pat no. 4594* (NEB).
- Polymnia canadensis* L.—[**syn: Polymnia canadensis L. var. radiata A. Gray**] near Mountain House, 9 Aug 1898, *Cat. no. 1149* (BUF); near Old Mountain House, in warm rocky soil, 9 Aug 1898, 859a (ECH); Chemung Narrows, rich or rocky soil, 13 Aug 1882, 859 (ECH).
- Prenanthes alba* L.—[**syn: Nabalus albus (L.) Hook.**] Elmira, near fairgrounds, woods, 24 Aug 1884, 425b (BUF); Chemung Narrows, borders of rich woods, 13 Sep 1880, 425 (ECH); Cobble Hill, Ashland, in woods and thickets, 21 Aug 1898, 425a (ECH).
- Prenanthes altissimus* L.—[**syn: Nabalus altissimus (L.) Hook.**] N side Sullivan Hill, in woods and thickets, 13 Sep 1895, 1066 (ECH).
- Prenanthes serpentina* Pursh—Cobble Hill, Chemung Valley, dry soil & woods, thickets, 12 Aug 1892, 1122 (ECH).
- Prenanthes trifoliolata* (Cass.) Fern.—[**syn: Nabalus trifoliolatus Cass.**] Sullivan Hill Woods, 1897, 1123 (ECH).
- Prenanthes trifoliolata* (Cass.) Fern. f. *leptomera* Sherff.—[**Original identification: Prenanthes altissimus – Holotype/Isotype - F**] Sullivan Hill, on [] shaded slope, 6 Sep 1897, *Heller no. 14473a* (F); Sullivan Hill, on [] shaded slope, 7 Sep 1897, *Heller no. 14473b* (F).
- * *Rudbeckia fulgida* Aiton—**NY Rarities - T3**; near Harrington's Ford, 3 Jul 1893, 1424 (BUF, US).
- Rudbeckia hirta* L.—along Newtown Creek, Horseheads, dry soil, meadows, 20 Jul 1884, 3871 (ECH).
- Rudbeckia laciniata* L.—Botany Swamp, Elmira, in moist thickets or about swamps, 28 Jul 1895, *s.n.* (ECH); Ravine on Mt Zoar Hill, low thickets, 18 Aug 1894, 419 (ECH).
- Senecio aureus* L.—Lowman's Swamp, wet swamps, 20 May 1880, 189 (ECH).
- Senecio vulgaris* L.—Elmira, 28 Aug 1898, *s.n.* (F); 5th Ward, gardens, 1 Jul 1892, 952 (ECH).
- Sericocarpus asteroides* (L.) B.S.P.—Sullivan Hill, at top, in dry woods, 18 Jul 1895, *s.n.* (ECH).
- Silybum marianum* (L.) Gaertn.—[**syn: Mariana mariana (L.) Hill**] Elmira, gardens, rare, 23 Aug 1897, *s.n.* (ECH).
- Solidago arguta* Aiton—Sullivan Hill, rocky woods, 6 Sep 1897, *s.n.* (BUF, US); near Wellsburg, copses and moist woods, 28 Aug 1888, 860 (ECH).
- Solidago bicolor* L.—Elmira, Mt Zoar Hill Road, 18 Sep 1898, *s.n.* (BH, BUF, US); East Elmira, 11 Sep 1898, *s.n.* (BUF, US); E Elmira, fields, dry banks, woods, 15 Sep 1887, 573 (ECH).
- Solidago caesia* L.—no location, Sep 1896, *s.n.* (BKL); Mt Zoar Hill, woods, 26 Sep 1896, 659 ½ (ECH).
- Solidago caesia* L. var. *caesia*—[**syn: Solidago caesia L. var. axillaris (Pursh) A. Gray**] East Hill, 5 Oct 1899, 1364 (BH, BUF, US); below Lowman, on knoll of bank of D.L.&W. railroad, dry woods, 11 Sep 1898, 659 (BUF, US); Mt Zoar Hill, 18 Sep 1898, *s.n.* (?); Sullivan Hill, rich woodlands in shade, 20 Sep 1882, 659 (ECH).
- Solidago canadensis* L.—Cobble Hill, 3 Sep 1899, 1348 (BUF, US); Elmira, 15 Sep 1887, *s.n.* (BUF, US); near Mountain House, 3 Aug 1899, 1316 (BUF, US); near Pine Valley, 6 Sep 1898, *s.n.* (BH, BUF, US); Ashland, Fruit Homestead, 10 Sep 1882, *s.n.* (BUF); "Baden Baden," 11 Sep 1898, 1348 (?); wood above State Fair Grounds, fields and thickets, 24 Aug 1884, 574 (ECH).
- Solidago flexicaulis* L.—[**syn: Solidago latifolia L.**] up Dry Run, 8 Sep 1897, *s.n.* (ECH, BH, BUF, US); Greatsinger's Corner, shaded moist places, 17 Sep 1894, 536 (ECH).
- Solidago gigantea* Aiton—[**syn: Solidago serotina Ait. var. gigantea A. Gray**] near Greatsinger's Corner, banks of streams, thicket and low grounds, 17 Aug 1897, 731 (ECH); along Old Canal, by stream, 14 Aug 1897, *s.n.* (BUF); no location, Aug 1897, *s.n.* (BKL).
- Solidago gigantea* Aiton var. *leiphylla* Fernald—[**syn: Solidago serotina Ait.**] Big Flats, copses and fence rows, 17 Aug 1888, 970 (ECH).
- Solidago juncea* Aiton—fields, roadsides & woods, 6 Aug 1899, 111 (BUF); no location, no date, *s.n.* (BUF); Fitch's Bridge, 21 Jul 1884, 1330 (BUF); Ashland, Cobble Hill, copse & banks, 12 Aug 1892, 111 (ECH).
- Solidago nemoralis* Aiton—near Pine Valley, 6 Sep 1894, *s.n.* (BH, BUF, US); E of Elmira, 11 Sep 1898, *s.n.* (BH, BUF, US); Elmira, sterile soil, fields, roadsides, 15 Sep 1887, 739 (ECH).
- Solidago odora* Aiton—Ashland, Fruit Homestead, 17 Jul 1879, 1330 (BUF).
- Solidago patula* Muhl.—Mt Zoar Hill, ravine, swamps, wet soil, 18 Aug 1894, 631 (ECH).
- Solidago rugosa* Mill.—Horseheads, up Latty Brook, 29 Aug 1897, *s.n.* (BUF, US); Greatsinger's Corner, edge of swampy woods, 16

- Sep 1896, *s.n.* (ECH, BH, BUF, MO, NY, US); along Hendy Creek, border of woods & copses, 16 Sep 1893, 311 (ECH).
- Solidago serotina* Aiton—Harrington's Ford, 20 Aug 1890, *s.n.* (BUF, US); Elmira, between Old Grist Mill and foot of Water St and the [], 25 Sep 1898, *s.n.* (BUF, US).
- Solidago spectabilis* (D. C. Eaton) A. Gray—[syn: *Solidago squarrosa* Muhl.] Sullivan Hill, north side, 15 Sep 1895, *Pat. no. 6266* (WIS).
- Solidago squarrosa* Muhl.—Elmira, near Mrs. Crane's by [illeg.] Stone Quarry, woods, 30 Aug 1896, *s.n.* (ECH, BH, BUF, NY, MICH, MO, US); Ashland, rocky woods and banks, 18 Sep 1887, 575 (ECH); dry woods, 30 Aug 1896, *Pat. no. 6266* (WIS).
- Solidago ulmifolia* Muhl. ex Willd.—Elmira, 7 Sep 1879, *Cat. no. 1352* (BUF); near Mountain House, 2 Sep 1897, *s.n.* (BUF); Mountain House Narrows, 2 Sep 1897, *s.n.* (ECH, BH, BUF, NY, US); Elmira, east: Arnot's Woods, 4 Sep 1882, 1352 (BUF); Lowman's Swamp, 28 Aug 1888, *s.n.* (BUF); Elmira, 15 Sep 1887, 3706 (BH, BUF, US); Arnot's Woods, East Elmira, ravines, 15 Sep 1887, 743 (ECH).
- Sonchus arvensis* L.—Elmira, 14 Sep 1897, *s.n.* (BUF, US); Elmira, 17 Aug 1897, 1125 (BUF); Elmira, east end of Water Street, 13 Sep 1898, 1125 (ECH, BH, BUF, MICH, MO, NY, NYS, US); edge of field E Water St., Elmira, in low grounds along [] meadows and streams, 17 Aug 1897, 1125 (ECH).
- Sonchus asper* (L.) Hill—no location, Jul 1896, *s.n.* (BKL); along Newtown Creek, Elmira, in waste places, 11 Jul 1896, 1119 (ECH).
- Sonchus oleraceus* L.—Elmira, garden of Mrs. Jarvis, 27 Aug 1897, *s.n.* (BUF); Elmira, garden, 20 Jul 1898, *s.n.* (ECH, BH, BUF, NY, US); Elmira, garden, 5 Jul 1898, *s.n.* (BUF, US); Ashland, waste places and around dwellings, 27 Jul 1882, 280 (ECH).
- Sonchus* sp.—Elmira, garden, 19 Jun 1899, 1291 (BUF, US).
- Symphotrichum cordifolium* (L.) G.L. Nesom—[syn: *Aster cordifolium* L.; *Aster cordifolia* var. *laevigatus* Porter] Elmira, Mt Zoar Hill, 23 Sep 1894, *s.n.* (BUF); by Tremain's, moist woods, 17 Sep 1894, *s.n.* (BUF); Elmira, 29 Sep 1887, *s.n.* (BUF); Southport, 3 Oct 1887, *s.n.* (BUF); Horseheads, up Latty Brook, 27 Sep 1897, *s.n.* (BUF, US); East Hill, 5 Oct 1899, 1362 (BUF, US); Southport, Mudlick, 11 Sep 1884, *s.n.* (BUF, US); Chemung Narrows, 25 Sep 1894, *s.n.* (ECH, BH, BUF, US); Ashland, Sullivan Hill, 12 Sep 1879, *Cat. no. 1235* (BUF); over East Hill, typical, 29 Sep 1896, 741 (BUF); East Hill, 25 Sep 1895, *s.n.* (?); near Pest House & D.L.&W. railroad, 11 Oct 1887, *s.n.* (BUF); Elmira, on warm hills, 17 Sep 1897, 1126 (SEINet); in the Jenkin's Woods, near Greatsinger's Corner, in low moist woods, 17 Sep 1894, *s.n.* (ECH); no location, 30 Sep 1897, *Pat. no. 4629* (NEB).
- Symphotrichum cordifolium* (L.) G.L. Nesom var. *lancoelatum* (Porter) G.L. Nesom—[syn: *Aster cordifolium* L. var. *lancoelatus* Porter] over East Hill, 29 Sep 1896, *s.n.* (BUF, US); on warm hills, 17 Sep 1897, *s.n.* (BUF); bank along Old Canal, 14 Sep 1897, *s.n.* (?).
- Symphotrichum cordifolium* (L.) G.L. Nesom var. *polycephalum* (Porter) G.L. Nesom—[syn: *Aster cordifolium* L. var. *polycephalus* Porter] Southport, 3 Oct 1887, *s.n.* (BUF); East Hill, upland roadside, woods & thickets, 16 Sep 1896, 741c (ECH).
- Symphotrichum drummondii* (Lindl.) G.L. Nesom—no location, Sep 1897, *s.n.* (BKL).
- Symphotrichum ericoides* (L.) G.L. Nesom—[syn: *Aster ericoides* L.] roadside, foot of tree by J. Lowman's, 22 Sep 1897, *s.n.* (BUF, US); Ketchum's Farm, 29 Sep 1896, *s.n.* (BUF); Chemung Narrows, 13 Sep 1882, *s.n.* (BUF); Chemung Narrows, 25 Sep 1894, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); Chemung Narrows, dry open places, 13 Sep 1882, 895 (ECH), near "Old Mountain House" Narrows, 9 Aug 1898, 895a (ECH).
- Symphotrichum laeve* (L.) A. Löve & D. Löve—[syn: *Aster laevis* L. var. *laevigatus*] Ashland, border of woodland, 2 Oct 1894, 740 (ECH).
- Symphotrichum laeve* (L.) A. Löve & D. Löve var. *concinnum* (Willd.) G.L. Nesom—[syn: *Aster concinnum* Willd.] Ashland, in low moist ground, 2 Oct 1897, *s.n.* (ECH).
- Symphotrichum lanceolatum* (Willd.) G.L. Nesom—[syn: *Aster lanceolatus* Willd.; *Aster paniculatus* Lam. var. *bellidiflorus* (Willd.) E.S. Burgess] no location, Sep 1897, *s.n.* (BKL); no location, Oct 1894, *s.n.* (BKL); low grounds, 9 Oct 1896, *Pat. no. 4769* (NEB); Cobble Hill, 3 Sep 1899, 1349 (BUF); road to Lowman, 22 Sep 1897, 1071 (?); low grounds, 18 Sep 1898, 1071 (BUF, US).
- Symphotrichum lanceolatum* (Willd.) G.L. Nesom subsp. *lancoelatum* var. *lancoelatum*—[syn: *Aster paniculatus* Lam., *Aster paniculatus* Lam. var. *simplex* (Willd.) E.S. Burgess, *Aster simplex* Willd.] Elmira, garden, 22 Sep 1899, 1359 (BUF); 4 mi E of Elmira, roadside near Hug Hollow, 9 Oct 1896, 1071c (BUF); Big Island, low grounds, 5 Oct 1893, 1014 (BUF, US); Big Island, 1893, 1014 (ECH); Elmira, garden, 24 Sep 1893, *s.n.* (BUF); Ashland, Fruit Homestead, 26 Sep 1882, *s.n.* (?); low grounds, 14 Sep 1897, 1014 (?).
- Symphotrichum laterifolium* (L.) A. Löve & D. Löve—[syn: *Aster dif-fusus* Ait.; *Aster laterifolius* (L.) Britton] East of City [Elmira], 11 Sep 1898, *s.n.* (BUF); no location, Sep 1897, *s.n.* (BKL); East Hill, 5 Oct 1897, 1363 (BUF); Elmira, Mt Zoar Hill, road, 18 Sep 1898, *s.n.* (ECH, BH, BUF, MO, NY, US); Elmira, thickets, fields, etc., 30 Sep 1887, 310 (ECH).
- Symphotrichum lateriflorum* (L.) A. Löve & D. Löve var. *lateriflorum*—[syn: *Aster diffusus* Ait. var. *hirsuticaulis* A. Gray] swamp on Baldwin Creek, in low wet shady places, 9 Oct 1893, 1015 (ECH).
- Symphotrichum lowrieianum* (Porter) G.L. Nesom—[syn: *Aster lowrieianus* Porter, *Aster cordifolium* L. var. *laevigatus* Porter] Elmira, Arnot's woods, 15 Sep 1897, *s.n.* (BUF); Levy Road, 20 Sep 1896, *s.n.* (?); Elmira, Mt Zoar Hill, 30 Sep 1894, *s.n.* (BH, BUF, US); Elmira, above Stone Quarry left of Water Cure Hill, woods, 30 Aug 1896, *s.n.* (BUF, US); East Hill, 5 Oct 1899, 1360 (BH, BUF, US); Chemung, Chemung Narrows, 13 Sep 1882, *s.n.* (BUF, US); Chemung Narrows, 13 Sep 1882, *Cat. no. 1267* (BH, BUF, US); East Hill, 5 Oct 1899, 1361 (BUF); over East Hill, 26 Sep 1896, *s.n.* (ECH, BH, BUF, US); my woods Greatsinger's Corner, 16 Sep 1896, *s.n.* (BUF); Chemung Narrows, in rocky woods and on warm slopes, 25 Sep 1894, 896 (ECH); along upland road, above East Hill, roadsides and edges of woods, 26 Sep 1896, 1126 (ECH).
- Symphotrichum novae-angliae* (L.) G.L. Nesom—[syn: *Aster novae-angliae* L.] Ashland, 15 Sep 1879, *Cat. no. 1257* (BH, BUF, US); East Elmira, 10 Sep 1893, *s.n.* (BUF); along Old Canal, E Elmira, moist low ground, 10 Sep 1893, 133 (ECH).
- Symphotrichum ontarionis* (Wiegand) G.L. Nesom—[syn: *Aster diffusus* Ait., *Aster diffusus* Ait. var. *thyrsoides* A. Gray] Elmira, 30 Sep 1887, 3640 (BUF); Lowman's Swamp, 22 Sep 1897, *s.n.* (BUF); Mt Zoar Hill, in upland woods, 1 Oct 1887, 310½ (ECH).
- Symphotrichum praealtum* (Poir.) G.L. Nesom—[syn: *Aster salicifolius* Ait. x *paniculatus*] bank of Old Chemung Canal, E of Elmira, 10 Sep 1893, *s.n.* (ECH).
- Symphotrichum prenanthoides* (Muhl ex Willd.) G.L. Nesom—[syn: *Aster prenanthoides* Muhl.] along Baldwin Creek, swamp along Greatsinger's Corner, 9 Oct 1893, *s.n.* (BUF); Elmira, Rorick's Glen, 19 Aug 1888, 262 (BUF); Elmira, Rorick's Glen, 31 Aug 1890, *s.n.* (BUF); Pine City, Mudlick Creek, 11 Sep 1884, 1262 (BUF); moist low ground, 18 Sep 1898, 142 (BUF); Baldwin, Greatsinger's Swamp, 12 Sep 1882, 1262 (BUF); Southport, 3 Oct 1887, *s.n.* (BUF, US); Mt Zoar Hill, wet places, swamps, 1 Oct 1887, 142 (ECH).
- Symphotrichum puniceum* (L.) G.L. Nesom—[syn: *Aster puniceus* L.] near Baldwin Creek, 9 Oct 1893, *s.n.* (BUF, US); Elmira, Mt Zoar crossroad, 20 Sep 1896, *s.n.* (BUF, US); Greatsinger's Corner, swamp above, 9 Oct 1893, *s.n.* (BH, BUF, US); Mudlick Creek, not

- common, 11 Sep 1884, 3840 (BUF); Mt Zoar road, moist ground, marshes and along streams, 20 Sep 1896, 742 (ECH).
- Symphytotrichum sagittifolium* (Weden. ex Willd.) G.L. Nesom—[**syn: Aster sagittifolius Weden. ex Willd.**] Elmira, Water St., woods near fairgrounds, 24 Aug 1884, 819 (BH, BUF, US); Lowman's Swamp, 22 Sep 1897, s.n. (BUF); East Hill, 6 Sep 1897, 5194 (?); shaded banks & woods, 17 Sep 1894, 819 (BH, BUF, US); East Hill Rd, 17 Sep 1894, s.n. (BUF); Cobble Hill, 3 Sep 1899, 1342 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Road up East Hill, dry ground, open, 17 Sep 1894, 819 (ECH).
- Symphytotrichum* sp.—[**syn: Aster cordifolium L. var. diffusus Ait.**] Elmira, H. Madg., 30 Sep 1887, s.n. (BUF); Elmira, Mt Zoar Hill, 23 Sep 1894, s.n. (BUF); Elmira, Mt Zoar Hill, 23 Sep 1894, s.n. (BUF); [near Mountain House Narrows], 9 Aug 1898, s.n. (BUF); Elmira, Mt Zoar Hill, no date, s.n. (BUF); along D.L.&W. railroad opposite Pest House, in open ground, 11 Oct 1887, s.n. (ECH); Mike Jenkin's Woods, Greatsinger's Corner, 1894, s.n. (ECH).
- Symphytotrichum tradescantii* x *paniculatus*—[**syn: Aster tradescanti L. x paniculatus**] Pine Valley, swale south of town, 6 Sep 1898, s.n. (BH, BUF, US).
- Symphytotrichum tradescantii* (L.) G.L. Nesom—[**syn: Aster tradescanti L.**] over East Hill, 29 Sep 1896, s.n. (BUF); just beyond Hug Hollow on hill, roadside, 22 Sep 1896, s.n. (?); East Hill, 25 Sep 1896, s.n. (ECH, BH, BUF, MICH, MO, NY, US); Pine Valley, low swale south of town west road, low grounds, 6 Sep 1898, 1161 (ECH, BH, BUF, MO, NY, US); above Horseheads, 31 Aug 1898, s.n. (ECH, BH, BUF, US); Ashland, Fruit Homestead, along canal, 26 Sep 1879, 1275 (BUF); near Rorick's Glen, 17 Sep 1897, s.n. (BUF); Pine Valley, low swale south of town, 6 Sep 1898, s.n. (BUF); S of Pine Valley, wet swales, 6 Sep 1898, 1163 (ECH); S of Pine Valley, field, moist swales & swamps, 6 Sep 1898, 1161 (ECH); S of Pine Valley, low swale, moist soil, 6 Sep 1898, 1162 (ECH).
- Symphytotrichum undulatum* (L.) G.L. Nesom—[**syn: Aster undulatus L.**] near Rorick's Glen, dry hill woods, 17 Sep 1897, s.n. (ECH, BH, BUF, US); Elmira, Mt Zoar Hill, 18 Sep 1898, s.n. (?); Ashland, Sullivan Hill, Fruit Homestead, 12 Sep 1879, 1278 (?); near the Pest House, 11 Oct 1887, s.n. (?); N side of Sullivan Hill, in dry woods, 13 Sep 1895, 143a (ECH); Mt Zoar Hill, dry copsis woods, 23 Sep 1894, 143 (ECH).
- Tanacetum vulgare* L.—Horseheads, Latty Brook, roadside, 29 Aug 1897, s.n. (BUF); no location, Aug 1897, s.n. (BKL); E Elmira, along roads, 6 Jul 1886, 301 (ECH).
- Taraxacum officinale* Weber ex Wiggers—Elmira, gardens, 19 May 1893, 123 (ECH).
- Tragopogon porrifolius* L.—above Horseheads, near a deserted house right side road, 27 Jun 1896, s.n. (?); near Pine Valley, 19 Jun 1896, s.n. (BUF, US); between Horseheads and Pine Valley, roadside, sparingly escapes, 27 Jun 1896, 481 (ECH).
- Tragopogon pratensis* L.—along D.L.&W. railroad, 15 Jun 189[], s.n. (ECH, BH, BUF, US); near S. Pine Valley, 19 Jun 1897, s.n. (BUF, US); along D.L.&W. railroad at Grand Central Ave crossing, 15 Jun 1897, 953 (ECH).
- Tussilago farfara* L.—Millport, 13 Aug 1897, s.n. (BUF, US); Millport, 3 May 1897, s.n. (BUF); Millport, 30 Apr 1897, s.n. (BUF); Millport, 16 Sep 1898, s.n. (BUF, US); Big Island, Chemung River, low sandy places, 15 May 1887, 937 (ECH).
- Xanthium canadense* Mill.—Elmira, 16 Aug 1899, 1329 (BUF); near Harrington's Ford, river banks and waste places, common, 20 Aug 1890, 554 (ECH).
- Xanthium strumarium* L.—(Originally identified as *X. canadense* Mill.) HOLOTYPE (F): *Xanthium arcuatum* Millsp. & Sherff; river shores & low places, common, 11 Oct 1896, Heller no. 1427 (F).
- Indet.—Elmira, garden, 1 Jul 1899, 1300 (BUF); Elmira, garden, 26 Jul 1888, s.n. (BUF); Millport, entrance of Johnson Hollow Road, 6 Sep 1898, s.n. (BUF); Elmira, Mt Zoar Hill, Oct 1887, s.n. (BUF).
- ### Convolvulaceae
- Calystegia sepium* (L.) R. Br.—Elmira, Valley of Chemung, 30 Jun 1879, *Cat. no. 2172* (BUF, US); near Water Works, riverbank, 11 Jul 1884, s.n. (BUF).
- Calystegia sepium* (L.) R. Br. var. *sepium*—[**syn: Convolvulus sepium L.**] banks Chemung River, Elmira, moist alluvial soil, 11 Jul 1884, 414 (ECH); opposite Strathmore, roadside, 19 Jul 1899, 1302 (ECH, BH, BUF, MO, NY, US); roadside opposite 'Strathmort', Elmira, fields and thickets, roadsides, 19 Jul 1899, 1302 (ECH).
- Calystegia spithamea* (L.) Pursh—[**syn: Convolvulus spithameus L.**] along road below Elmira, on banks, 12 Jun 1893, s.n. (BUF, US); Ashland, on warm sandy slopes, 19 Jun 1882, 5928 (BUF, US); Elmira, east; Arnot's Woods, 14 Jun 1882, s.n. (BUF); East Elmira, dry and sandy or rocky soil, 17 Jun 1882, 144 (ECH).
- Calystegia spithamea* (L.) Pursh var. *purshiana* (Wherry) Brummitt—[**syn: Calystegia sepium (L.) R. Br. var. pubescens A. Gray**] at Seeley Creek Bridge, roadside, in dry fields, 2 Jul 1895 *Coll. no. 1029* (ECH).
- Convolvulus arvensis* L.—in C. Davis' Garden, Elmira, in fields, waste places, gardens, 23 Jul 1898, s.n. (ECH).
- Ipomoea repens* (L.) Lam.—[**syn: Convolvulus sepium L. var. repens A. Gray**] Seeley Creek Bridge, 1895, 1029 (ECH).
- ### Cornaceae
- Cornus alba* L. subsp. *stolonifera* (Michx.) Wangerin—[**syn: Cornus stolonifera Michx.**] Newtown Creek, Horseheads, low wet places, 23 Aug 1879, 738 (ECH).
- Cornus alternifolia* L. f.—Sullivan Hill, hillside, ravines and woods, 29 Jun 1882, 363 (ECH).
- Cornus amomum* Mill.—Old Canal Bed near Harrington's Ford, low woods and along streams, 1 Aug 1896, 385a (ECH).
- Cornus canadensis* L.—Greatsinger's Swamp, damp cool woods, 30 May 1884, 539 (ECH).
- Cornus florida* L.—in woodland ravines mainly, 17 May 1897, *Heller no. 9311* (F); Hendy Creek, dry woods, 24 May 1887, 318 (ECH); W of Old Mountain House, in ravines and upland woods, 17 May 1896, 318a (ECH).
- Cornus racemosa* Lam.—[**syn: Cornus paniculata L'Her.**] near Rorick's Glen, thickets and river banks and near marshes, 20 Jun 1886, 369 (ECH).
- Cornus rugosa* Lam.—[**syn: Cornus cirinata L'Her.**] near top of Sullivan Hill, N side, [] shaded rocky [c_] hillside, 1 Aug 1896, 383a (ECH); Wilkes Swamp & Cobble Hill, ravines, copse, hills, 6 Jun 1880, 383 (ECH).
- Cornus sericea* L.—near Old People's Home, Elmira, low grounds, wet places, 24 Jun 1884, 385 (ECH).
- Nyssa sylvatica* Marsh.—single tree on East Hill, roadside half way up, in rich moist soil, 16 Sep 1896, 955 (ECH); Southport, rich low soil, 12 Jun 1887, 955 (ECH).
- ### Crassularaceae
- Penthorum sedoides* L.—marsh, Seventh Ward, Elmira, open wet places, 8 Aug 1892, 165 (ECH).
- Sedum acre* L.—Wellsburg village, rocks and roadsides, stone walls, 22 Jun 1898, 500 (ECH).
- Sedum telephium* L.—[**syn: Sedum telephium L. subsp. purpureum (Schultz) Schinz & Keller**] roadside near Fitches Bridge, fields, roadside, dry rocks and banks, 17 Aug 1896, 924 (ECH).
- ### Cucurbitaceae
- Echinocystis lobata* (Michx.) Torr. & A. Gray—near South Fair Grounds, rich soil along rivers, 24 Aug 1884, 721 (ECH); Elmira,

- garden, 8 Sep 1896, *s.n.* (BUF, US); Elmira, garden, 9 Aug 1896, *s.n.* (BUF, US); Elmira, Harrington's Island, rich soil along river, 3 Aug 1893, *s.n.* (BUF, US); Elmira, garden, 25 Aug 1897, *s.n.* (BH, BUF, US).
- Sicyos angulatus* L.—Elmira, river banks and damp places, 26 Aug 1892, 302 (ECH); Elmira, river banks & damp yards, 26 Aug 1892, *s.n.* (BUF, US).
- Indet.—Elmira, garden, 17 Aug 1899, 1330 (ECH, BH, BUF, NY, MO, US).
- Cupressaceae**
- Juniperus virginiana* L. var. *virginiana*—Chemung Narrows, 23 Apr 1890, 294 (NY).
- Cuscutaceae**
- Cuscuta gronovii* Willd. ex Schultz—Miller's Pond, 5 Aug 1897, *s.n.* (BUF); Elmira, 15 Sep 1887, *s.n.* (BUF); Chemung River, banks, 19 Aug 1879, *s.n.* (BUF); Ashland, wet shady places, 19 Aug 1879, 415 (ECH).
- Cyperaceae**
- Carex albursina* Sheldon—same old woods, 16 Jun 1896, *s.n.* (?); old rich woods & ravines, 13 Jun 1897, *s.n.* (BH, BUF, US); Greatsinger's Corner, swampy woods, 20 Jun 1896, *s.n.* (BUF); Elmira, Mt Zoar Hill, woods, 10 Jun 1895, *s.n.* (BUF); Mt Zoar, rich woods, 16 Jun 1896, *Pat. no. 11095* (CONN); Mt Zoar Hill, 7 Jun 1893, 1053 (ECH).
- Carex amphibola* Steudel—[**syn: Carex grisea Wahlenb.**] wet open woods, 7 Jun 1897, *Heller no. 1603* (F).
- Carex arctata* Boott ex Hook.—Pine City, Dry Run, beech woods, 11 Jun 1898, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); Greatsinger's Swamp, 7 Jul 1889, *Cat. no. 3267* (BUF); Greatsinger's Swamp, 7 Jul 1889, 979 (ECH).
- Carex blanda* Dewey—[**syn: Carex laxiflora Lam. var. blanda (Dewey) Boott**] Ashland, Chemung River, 21 Jun 1882, *s.n.* (BUF).
- Carex bromoides* Schkuhr ex Willd.—Veteran, low moist open woods, 7 Jun 1897, *s.n.* (ECH, BH, BUF, US); Big Flats, 6 Jun 1898, *s.n.* (BUF); Van Etten Swamp, 13 Jun 1899, 1285 (ECH, BH, BUF, MICH, MO, NY, US); over East Hill, by little creek, 6 Jun 1896, *s.n.* (BUF); no location, Jun 1897, *s.n.* (BKL); near creek over East Hill, 1896, 1051 (ECH).
- Carex bromoides* Schkuhr ex Willd. subsp. *bromoides*—Chemung River, bogs and swamps, 7 Jun 1897, *Pat. no. 10908* (MO, CONN).
- Carex cephaloidea* (Dewey) Dewey—Sullivan Hill, south side, 18 Jun 1882, 882½ (ECH); Sullivan Hill, north side, 10 Jul 1896, 882 (ECH).
- Carex communis* Bailey—near Seeley Creek Bridge, on knoll below where I took picture near Seeley Creek Bridge, 21 May 1895, *s.n.* (ECH, BH, BUF, NY, MO, US); Sullivan Hill, 3 Jun 1896, *s.n.* (BUF); near Seeley Creek bridge, 24 May 1896, *s.n.* (BUF, US).
- Carex comosa* Boott—Southport, Miller's Pond, 10 Jul 1883, 3219 (BH, BUF, US); Southport, Miller's Pond, 10 Jul 1898, *s.n.* (BUF, US); near Eldridge Park, 4 Jun 1899, 1245 (ECH, BH, BUF, US); Van Etten Swamp, 13 Jun 1899, 1274 (BH, BUF, US).
- Carex complanata* Torr. & Hook.—Sullivan Hill, 29 Jun 1882, *s.n.* (BUF).
- * *Carex conjuncta* Boott—**NY Rarities - T-3**; Van Etten Swamp, along railroad, in moist meadows and thickets, 13 Jun 1899, 1286 (BUF); Van Etten railroad, 13 Jun 1899, 1286 (BH, BUF, US).
- Carex crinita* Lam.—[**syn: Carex crinita Lam. var. minor Boott**] E of Elmira, Arnot's Canal, 7 Jul 1882, *Cat. no. 3223* (BUF); Big Flats, Lowe's pond, 8 Jul 1888, *s.n.* (ECH, BH, BUF, US); Elmira, below watering trough of Mt Zoar Road, 13 Jun 1897, *s.n.* (ECH, BH, BUF, NY, US); Greatsinger's Swamp, 27 May 1882, *s.n.* (BUF); Van Etten Swamp, near crossroads, 13 Jun 1899, 1272 (ECH, BH, BUF, MICH, MO, NY, US); Greatsinger's Corner, 6 Jun 1879, *s.n.* (BUF); Elmira, along Old Canal, 12 Aug 1892, *s.n.* (BUF); Mt Zoar Hill, roadside, swamps and wet woods and roadside, 13 Jun 1897, 852 (ECH); along old Chemung Canal, East of Elmira, 7 Jul 1882, 853 (ECH).
- Carex crinita* Lam. var. *gynandra* (Schwein.) Schwein. & Torr.—[**syn: Carex gynandra Schwein. & Torr.**] bogs and swamps, 6 Jun 1897, *s.n.* (WIS).
- Carex cristatella* Britton—Elmira, along creek, 11 Jul 1896, 11268 (CONN); Elmira, along Newtown Creek, 11 Jul 1896, 11248 (WIS).
- Carex deweyana* Schwein.—in valley over East Hill, 24 Jun 1895, 1027 (ECH).
- Carex digitalis* Willd.—along Mt Zoar Hill road, 11 Jun 1896, 1052 (ECH).
- Carex flava* L.—on Mud Pond at head, near Pond Brook, 24 Jul 1897, *s.n.* (BUF).
- Carex gracilescens* Steud.—woods and ravines, 13 Jun 1897, 11063 (MO).
- Carex gracillima* Schwein.—woods, nearby road, 16 Jun 1896, *s.n.* (BH, BUF, US); same old woods [Mt Zoar], 13 Jun 1897, *s.n.* (?); Veteran, Lowman's Swamp, moist woods & meadows, 7 Jun 1897, *s.n.* (?); Lowman's Swamp, 7 May 1889, *s.n.* (BUF); [Greatsinger's Corner], swampy woods, 27 May 1897, *s.n.* (?); Big Flats, Tomarck Swamp, moist woods & meadows, 8 Jul 1888, *s.n.* (BUF); Van Etten, 13 Jun 1899, 1287 (ECH, BH, BUF, US); moist woods and meadows, 7 Jun 1897, *Pat. no. 11015* (MO); no location, Jun 1897, *s.n.* (BKL); Mt Zoar Hill, moist ravine, 16 Jun 1896, *Pat. no. 11015* (OS); Greatsinger's Corner, 8 Jun 1894, 759 (ECH).
- Carex granularis* Muhl. ex Willd.—Ashland, Fruit Homestead, by spring ground, 16 Jun 1882, 11148 (BUF); Searles Farm, base of Sullivan Hill, 16 Jun 1882, 844 (ECH).
- Carex grisea* Wahlenb.—on Baldwin Creek, 19 May 1897, *s.n.* (BUF, US); Veterans, low moist woods, 7 Jun 1897, *s.n.* (BUF, US); [near fairgrounds], pine woods, 4 Jun 1884, *s.n.* (BUF); Baldwin Creek, 27 May 1882, 892 (ECH).
- Carex gynandra* Schwein.—[**syn: Carex crinita Lam. var. gynandra**] Hendy Creek, 26 Jul 1892, *s.n.* (BUF); bogs and swamps, 6 Jun 1897, *s.n.* (MO); Hendy Creek, 26 Jul 1892, 991 (ECH).
- Carex gynocrates* Wormsk. ex Drej.—Greatsinger's Swamp, 24 May 1882, *s.n.* (ECH, BH, BUF, NY, US).
- Carex hirsutella* Mack.—[**syn: Carex triceps Michx.**] Sullivan Hill, 29 Jun 1882, *Cat. no. 3343* (BUF); East Elmira; Arnot's Woods, roadside, 17 Jun 1882, *Cat. no. 3343* (BUF); Sullivan Hill, dry soil, 29 Jun 1896, *Pat. no. 11272* (WIS).
- Carex hirsutella* Mack. var. *hirsuta* Bailey—[**syn: Carex triceps Michx. var. hirsuta L.H. Bailey**] Arnot's Woods, East Hill, 17 Jun 1882, 846 (ECH); road to Erin from H. Carnes top of hill, edge of beech woods, 17 Jul 1896, *s.n.* (BH, BUF, US).
- Carex hystericina* Muhl. ex Willd.—[**syn: Carex hystericina Willd.**] Miller's Pond, 9 Jul 1898, 1113 (ECH, BH, BUF, MO, NY, US); Pond Brook, 24 Jul 1897, *s.n.* (BUF); Sullivan Hill, 28 May 1882, *s.n.* (BUF); Ashland, Fruit Homestead, by spring, 16 Jun 1882, *s.n.* (BUF); Botany Swamp, Elmira city, 16 Jun 1882, 880 (ECH).
- Carex hystericina x pseudocyperus*—Miller's Pond, 5 Aug 1897, 1113 (ECH, BH, BUF, US).
- Carex intumescens* Rudge—Lowman's Swamp, 13 Jul 1882, *Cat. no. 3260* (BUF); Elmira, Greatsinger's Corner, swamp, 6 Jun 1879, *Cat. no. 3260* (BUF); Veterans, low moist woods, 7 Jun 1897, *s.n.* (BUF); same old woods, 16 Jun 1896, *s.n.* (ECH, BH, BUF, US); over East Hill, 6 Jun 1896, *s.n.* (BUF, US); swampy woods, 20 Jun 1896, *s.n.* (ECH, BH, BUF, US); Lowman's Swamp, 13 Jul 1882, 685 (ECH).
- Carex laxiculmis* Schwein.—Jenkin's Woods, swamp, 27 May 1897, 1078 (BUF); Jenkin's Woods, 9 May 1898, *s.n.* (BUF, US);

- Horseheads, right fork of Latty Brook Road, beechwood, 13 May 1898, *s.n.* (BUF); Lowman's Swamp, 4 Jun 1897, 1078 (ECH).
- Carex laxiflora* Lam.—swampy woods, 6 Jun 18[] 1, *s.n.* (?); Pine City, up Dry Run, beech woods, 11 Jun 1898, *s.n.* (BUF); Greatsinger's Corner, swampy woods, 27 May 1897, *s.n.* (ECH, BH, BUF, US); Elmira, Mt Zoar Hill, woods, in ravine, 7 Jun 1893, *s.n.* (BUF); Elmira, Mt Zoar Hill, woods and ravines, 13 Jun 1897, *s.n.* (ECH, BH, BUF, NY, US); near Levy Hill, woods, 28 May 1893, *s.n.* (BUF, US); no location, May 1897, *s.n.* (BKL); Jenkin's Woods, Greatsinger's Corner, 14 May 1896, 976 (ECH).
- Carex laxiflora* Lam. var. *laxiflora*—[**syn: Carex laxiflora Lam var. patulifolia (Dewey) Carey**] Greatsinger's Corner, swampy woods (Green), 20 Jun 1896, *s.n.* (BUF); Elmira, back of Upper Reservoir, woods, 29 May 1898, *s.n.* (BUF); Elmira, Mt Zoar Hill, woods, 10 Jun 1895, *s.n.* (BUF); Sullivan Hill, 29 Jun 1882, *s.n.* (BUF); Lowman's Swamp, 4 Jun 1897, *s.n.* (BUF, US).
- Carex leptalea* Wahl.—Van Etten Swamp, 13 Jun 1899, 1282 (ECH, BH, BUF, NY, MO, US).
- Carex leptonevia* (Fernald) Fernald—[**syn: Carex laxiflora Lam var. varians Bailey**] Greatsinger's Corner, swampy woods, 27 May 1897, *s.n.* (?); Pine City, up Dry Run, 11 Jun 1898, *s.n.* (BUF, US); Ashland, Chemung River, 21 Jun 1882, *s.n.* (BUF, US); [Greatsinger's Corner], swampy woods, pretty sunny, 27 May 1897, 1077 (ECH, BH, BUF, NY, MO, US); [over East Hill], open grassy places, 6 Jun 1896, *s.n.* (BUF); Jenkin's Woods, low & moist, 27 May 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); Jenkin's Woods, low and moist, 27 May 1897, *Pat. no. 11070* (MO).
- Carex lupulina* Muhl. ex Willd.—Elmira, near Woolen Mills, marsh right hand of Oak Street, 8 Aug 1892, *s.n.* (BUF, US); along Newtown Creek, above Woolen Mill, swamps, 11 Jul 1896, *s.n.* (BH, BUF, US); on Ridge Road above Horseheads, woods, 16 Aug 1898, *s.n.* (ECH, BH, BUF, US); near Knoll, swales, 24 Jun 1898, *s.n.* (ECH, BH, BUF, NY, US); Elmira, Oak St, marsh, 1894, *s.n.* (BUF, US); marsh off Oak St, Elmira, 8 Aug 1892, 996 (ECH).
- Carex lurida* Wahl.—[**syn: Carex tentaculata Muhl. ex Willd., Carex lurida Wahl. var. gracilis Bailey**] near Marcellun's, marshy spot near woods up hill, 2 Jun 1879, *s.n.* (BUF); Elmira, marsh near G.P. Hem., 4 Jun 1899, 1249 (BUF, US); North Chemung, 1896, 1895 (ECH); Elmira, Old Canal, 12 Aug 1897, *s.n.* (BUF); swamps and wet places, 6 Jun 1896, *Pat. no. 11087* (MO); no location, Jun 1896, *s.n.* (BKL); Lowman's Swamp, 4 Jul 1886, 1059 (ECH).
- Carex normalis* Mack.—[**syn: Carex straminea Willd. ex Schk.**] Arnot's Woods, E of Elmira, driest copse and field, 26 Jun 1882, 885 (ECH).
- Carex pennsylvanica* Lam.—swampy woods, 20 Jun 1896, *s.n.* (BUF); Fruit Homestead & Elmira, 2 May 1879, *Cat. no. 3296* (?); Sullivan Hill, 30 Apr 1882, *Cat. no. 3296* (BUF, US); Sullivan Hill, 3 Jun 1896, *s.n.* (BH, BUF, US); Elmira, Mt Zoar, Levy Road, 8 Jun 1896, *s.n.* (ECH); Greatsinger's Corner, swampy woods, 28 Apr 1896, *s.n.* (ECH, BH, BUF, US); Lowman's Swamp, 30 Apr 1896, *s.n.* (ECH, BH, BUF, NY, US); Jenkin's Woods, 27 May 1897, *s.n.* (BUF, US); Sullivan Hill, 18 Jun 1882, *s.n.* (BUF, US); Sullivan Hill, 30 Apr 1882, *Coll. no. 662* (ECH).
- Carex plantaginea* Lam.—Horseheads, up Latty [Brook] Creek, beech wood, 13 May 1898, 757e (ECH, BH, BUF, MICH, MO, NY, NYS, US); Greatsinger's Corner, woods, 30 Apr 1895, *s.n.* (BUF); Jenkin's Woods, 9 May 1898, *s.n.* (BUF, US); Jenkin's Woods, 2 May 1899, 1183 (BUF, US); Jenkin's Woods, 1 May 1900, 1375 (ECH, BH, BUF, NY, US); Greatsinger's Corner, swampy woods, 30 Apr 1895, 757 (ECH); Greatsinger's Corner; rich low woods, 28 Apr 1896, *Pat. no. 11161* (P).
- Carex platyphylla* Carey—up Dry Run, beech woods, 8 Sep 1897, *s.n.* (BUF, US); up Dry Run, beech woods, 11 Jun 1898, *Heller no.* 1743 (ECH, BH, BUF, NY, US); Far Rockaway, 13 May 1900, 1395 (ECH, BH, BUF, US); Mt Zoar Hill, woods, 17 Jun 1894, 670 (ECH).
- Carex prasina* Wahl.—Mt Zoar Hill, 10 Jun 1882, 878 (ECH).
- Carex projecta* Mack.—[**syn: Carex tribuloides Wahl. var. moniliformis**] Veteran, roadside, 7 Jun 1897, 1080 (ECH).
- Carex pseudocyperus* L.—Lowe's Pond, Big Flats, 8 Jul 1888, 965 (ECH).
- Carex pseudocyperus* L. var. *pseudocyperus*—[**syn: Carex pseudocyperus L. var. americana Hochst.**] Miller's Pond, flowering 10 Jun 1887, 10 Jul 1883, 862 (ECH).
- Carex radiata* (Wahlenb.) Small—[**syn: Carex rosea Schkuhr ex Willd. var. radiata Dewey**] Van Etten Swamp, 13 Jun 1899, 1277 (ECH, BH, BUF, NY, US).
- § *Carex retroflexa* Muhl. ex Willd.—(State: E: TNC G5 S1); Sullivan Hill, in woods and thickets, 13 Jun 1886, 930 (BUF); Sullivan Hill, 13 Jun 1886, 930 (ECH).
- Carex retrorsa* Schwein.—along Newtown Creek, Elmira, 11 Jul 1896, 1058 (ECH).
- Carex riparia* Curtis—Van Etten Swamp, near crossroads, 13 Jun 1899, 1271 (ECH, BH, BUF, NY, MO, US).
- Carex rosea* Schkuhr ex Willd.—town of Veteran, Lowman's Woods, swamp, woods and thickets, 7 Jun 1897, *s.n.* (BUF); woods and thickets, 20 Jun 1897, *s.n.* (BUF, US); Lowman's Swamp, woods and thickets, 4 Jun 1897, *s.n.* (BUF, US); Sullivan Hill, woods, 3 Jun 1896, *s.n.* (BUF, US); Horseheads, [illeg.] woods, 11 Jun 1897, *s.n.* (BUF); woods and thickets, 20 Jun 1897, *Pat. no. 11192* (MO); Greatsinger's Woods, low woods, open places, drier woods, 20 Jun 1892, 1054 (ECH).
- Carex scabrata* Schkuhr ex Willd.—Chemung River bank, Ashland, wet meadows and glades, ravines, 21 May 1882, 958 (ECH).
- Carex scoparia* Schkuhr ex Willd.—East Hill, Elmira, woods, open swales, 7 Jul 1882, 889 (ECH).
- Carex* sp.—[Elmira, Mt Zoar Hill], woods near Levy Hill, 28 May 1893, *s.n.* (?); Ashland, banks of the Chemung River, 21 Jun 1882, *s.n.* (BUF, US); [Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (?); near Seeley Creek Bridge, 16 May 1895, *s.n.* (ECH, BH, BUF, US); near Seeley Creek Bridge, 24 May 1896, *s.n.* (BUF, US); Cobble Hill, 12 Aug 1892, *s.n.* (ECH, BH, BUF, US); near Seeley Creek Bridge, 16 May 1895, *s.n.* (BUF, US); Greatsinger's Corner, swampy woods, 28 Apr 1896, *s.n.* (BUF, US); Jenkin's Woods, 1 May 1900, 1377 (BH, BUF, US); Greatsinger's Corner, swampy woods, 27 May 1897, *s.n.* (BUF, US); up Latty Brook, beechwoods, 13 May 1898, *s.n.* (BH, BUF, US); up Dry Run, beechwoods, 11 Jun 1898, *s.n.* (BUF); Lowman's Swamp, 4 Jun 1897, *s.n.* (BUF); [Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (BUF, US).
- Carex sparganioides* Muhl. ex Willd.—river banks at Cottages, 30 Jul 1897, *s.n.* (BUF, US); Chemung River opposite "Bohemia," rich woods, slopes, 30 Jul 1897, 1112 (ECH).
- Carex spengelii* Dewey ex Spreng.—[**syn: Carex longirostris Torn. ex Schwein.**] Ashland, banks of the Chemung River, 21 Jul 1882, *Cat. no. 940* (BH, BUF, US); Ashland, 29 May 1887, *s.n.* (BUF); along Chemung River, Ashland, shady banks and moist thickets, 29 May 1887, 940 (ECH).
- Carex sterilis* Willd.—Lowman's Swamp, 4 Jun 1897, *s.n.* (BUF, US).
- Carex stipata* Muhl. ex Willd.—[**syn: Carex conjuncta Boott**] Elmira, Mt Zoar Hill, 10 Jun 1895, *s.n.* (BUF, US); Botany Swamp, 20 Jul 1892, *s.n.* (BUF); along railroad, Van Etten, wet ditch, 13 Jun 1899, 128 (ECH); Botany Swamp, Elmira, swales, 20 Jul 1892, 989 (ECH).
- Carex stricta* Lam.—Sullivan Hill, 18 Jun 1882, *s.n.* (BUF, US).
- Carex torta* Boott ex Tuckerm.—East Hill, on little creek tributary to Baldwin Creek, 31 May 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); on Ridge Road to Millsport, 7 Jun 1897, *s.n.* (?); Chemung River, along shaded rivulets, 31 May 1897, *s.n.* (CONN, ECH, BH,

- BUF, US); [over East Hill], edge of cool shaded creeks, 31 May 1897, *Pat. no. 11264* (MO); no location, May 1897, *s.n.* (BKL); bank of a little creek near East Hill, cold banks and swamps, 26 May 1895, 838 (ECH); [over East Hill], edge of cool shaded creeks, 31 May 1897, *Pat. no. 11264* (WIS); [] banks near water, 26 May 1896, *Pat. no. 11264* (WIS).
- Carex tribuloides* Wahl.—Van Etten Swamp, 13 Jun 1899, 1273 (BH, BUF, US); Elmira, swamp, low meadows & open swales, 2 Aug 1897, *s.n.* (BUF); Greatsinger's Corner, swampy woods, 20 Jun 1896, *s.n.* (?); along Newtown Creek, above Woolen Mill, 11 Jul 1896, 1057 (BUF, US); Low meadow & open swales, 2 Aug 1897, *Pat. no. 11266* (MO); no location, Aug 1897, *s.n.* (BKL); Elmira, 11 Jul 1896, 11248 (MO); along Newtown Creek, Elmira, 11 Jul 1896, 1057 (ECH); Botany Swamp, Elmira, moist ground, 4 Jul 1886, 888 (ECH); low meadow and open swales, 2 Aug 1897, *Pat. no. 11266* (WIS).
- Carex trisperma* Dewey—Pond Brook, 24 Jul 1897, *s.n.* (BUF).
- Carex tuckermanii* Dewey—Veterans, swamps and bogs, 7 Jun 1897, 891 (ECH, BH, BUF, MICH, MO, NY, US); Veteran, low woods, 7 Jun 1897, *s.n.* (BUF, US); near Erie railroad bridge, Seeley Creek, low open swale, 24 Jun 1898, 891a (ECH); Red Jacket Swamp, Veteran, 1898, *s.n.* (ECH); Veteran, N of Horseheads, in wet swales in low open woods, 7 Jun 1897, 891 (ECH).
- Carex utriculata* Boott—Newtown Creek, low moist ground along creek, 11 Jul 1896, *s.n.* (BUF); near mill, moist ground, 8 Aug 1892, 8830 (BUF).
- Carex vesicaria* L.—[**syn: Carex monile Tuckerm.**] Ashland, Fruit Homestead, 28 May 1882, 1138; swale near Seeley Creek near railroad bridge, meadows & swales, 24 Jun 1898, 1138 (ECH, BH, BUF, MICH, MO, NY, NYS, US).
- Carex vulpinoidea* Michx.—Meekes swamp [Wilks Jenkins?], 20 Jun 1880, *s.n.* (BUF); Sullivan Hill, 29 Jun 1882, *s.n.* (BUF); Sullivan Hill, 6 Aug 1882, *s.n.* (BUF); Botany Swamp, 20 Jul 1892, *s.n.* (BUF, US); Botany swamp, Elmira, 20 Jun 1892, 886 (ECH).
- Carex hartii* Dewey—[**Carex lurida x retrorsa**] East Hill, on a little creek, 26 May 1895, *s.n.* (BUF).
- Cyperus dentatus* Torr.—East Hill, roadside, 17 Aug 1897, *s.n.* (BUF, US); East Hill, roadside, 1 Aug 1896, *s.n.* (BUF, US).
- Cyperus esculentus* L.—Harrington's Island, shores, river banks, 12 Aug 1897, *s.n.* (BUF); Harrington's Island, 9 Aug 1885, *s.n.* (BUF, US); Harrington Island ford, low ground along river, 9 Aug 1885, 778 (ECH).
- Cyperus squarrosus* L.—[**syn: Cyperus inflexus Muhl.**] on Harrington Island, sandy, wet s [], 3 Jul 1880, 779 (ECH).
- Cyperus strigosus* L.—East Hill, marshy places, 17 Aug 1897, *s.n.* (ECH, BH, BUF, US); Eldridge Park, Elmira, in moist meadows, swamps or along streams, 25 Aug 1895, 1115 (ECH).
- Dulichium arundinaceum* (L.) Britton var. *arundinaceum*—[**syn: Dulichium spatheum Pers.**] 7th Ward, marsh, border of ponds & marsh, 8 Aug 1892, 1894 (ECH); 7th Ward, marsh, 8 Aug 1892, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US).
- Eleocharis acicularis* (L.) Roem. & Schult.—near Riverside Park, 19 Jul 1898, *s.n.* (BH, BUF, US).
- Eleocharis elliptica* Kunth var. *elliptica*—[**syn: Eleocharis acuminata (Muhl.) Nees**] along Seeley Creek near Elmira, in wet soil along streams, 21 May 1896, 1048½ (ECH).
- Eleocharis engelmannii* Steud.—along Chemung River, low wet places, 19 Jul 1898, *Heller no. 1990* (F).
- Eleocharis erythropoda* Steud.—[**syn: Eleocharis calva Torr.**], Chemung River, marsh, 14 Jul 1897, *Pat. no. 11435* (CONN).
- Eleocharis intermedia* (Muhl.) Schultes—opposite Fruit Homestead, Chemung River, marshes, 14 Jul 1897, 792 (BUF, US).
- Eleocharis obtusa* (Willd.) Schultes var. *ovata* (Roth) Drap. & Mohl.—[**syn: Eleocharis ovata (Roth) Roem. & Schult.**] bog head of Sullivan St., Elmira, muddy places, 8 Aug 1892, 997 (ECH); Baldwin Creek, near Lowman, 11 Aug 1897, *s.n.* (BUF, US); right hand of Sullivan Hill, not far above Woolen Mills, bog, 8 Aug 1892, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US).
- Eleocharis palustris* Roem. & Schult.—Lowe's Pond, 8 Jul 1888, 3087 (?).
- Schoenoplectus lacustris* (L.) Palla—[**syn: Scirpus lacustris L.**] Miller's Pond, ponds and swamps, 8 Aug 1896, *s.n.* (BUF); Botany Swamp, Elmira, common in still fresh water, 20 Jul 1892, 842 (ECH).
- Scirpus atrovirens* Muhl.—Botany Swamp, 20 Jul 1892, *s.n.* (BUF); Botany Swamp, Elmira, wet meadow and bog, 20 Jul 1892, 801 (ECH).
- Scirpus cyperinus* (L.) Kunth—Elmira, Arnot's Canal, 24 Jul 1887, *s.n.* (BUF).
- Scirpus cyperinus* (L.) Kunth. var. *pelius* Fernald—[**syn: Scirpus cyperinus (L.) Kunth**] in bed of Old Canal, E of Elmira, 10 Aug 1898, 1170 (ECH).
- Scirpus polyphyllus* Vahl—over East Hill, woods above road, 27 Jun 1894, *s.n.* (BUF, US); Chemung River, banks (gravel), 14 Aug 1880, *s.n.* (?); Hedy Creek, side of road, swamps and streams, 28 Jul 1892, 870 (BUF, US); along Hedy Creek, swamp wet woods and meadows, 25 Jul 1892, 870 (ECH).
- Scirpus* sp.—River Road, 29 Jun 1898, *s.n.* (BUF, US).
- Scirpus sylvaticus* L.—Hedy Creek, 18 Jun 1886, *s.n.* (BUF, US).
- Trichophorum planifolium* (Spreng.) Palla—[**syn: Scirpus planifolius Muhl.**] near Clemen on East Hill, Water Cure Hill, woods, 29 May 1896, *Cat. no. 868a* (BUF, US); Wilks Jenkins Swamp, dry or moist ground, slopes in woods, 20 Jun 1880, 868 (ECH). Indet.—on Rutan Farm, SW corner, swamp, 11 Sep 1884, 3066 (BUF); Ashland, Fruit Homestead, 1 Jun 1879, *s.n.* (BUF).

Dioscoreaceae

- Dioscorea villosa* L.—Ashland, Fruit Homestead, 6 Jul 1879, 2682 (BH, BUF, US); near Mountain House, 9 Aug 1898, *s.n.* (BH, BUF, US); Elmira, above fairgrounds, woods, 24 Aug 18[84], *s.n.* (?); Old State Fair Grounds, woods, 18 Jun 1884, 712 (ECH); bank of Chemung River opposite Bohemia, 17 Aug 1896, 712a (ECH).

Dipsacaceae

- Dipsacus fullonum* L.—[**syn: Dipsacus sylvestris Mill.**] East Hill, 8 Aug 1895, *s.n.* (BUF); East Elmira, 10 Sep 1893, *s.n.* (BUF); Chemung River, in bed, 24 Jul 1887, 163 (ECH).
- Scabiosa atropurpurea* L.—top of Water Cure Hill, on Ward's Farm, along fence, 23 Jun 1893, *s.n.* (BUF, US); Elmira, top of Water Cure Hill, 23 Jun 1893, 1002 (BUF); Elmira, 23 Jun 1896, *s.n.* (US); Water Cure Hill, 1893, 1002 (ECH).

Ericaceae

- Arsenococcus ligustrinus* (L.) Small—[**syn: Andromeda ligustrina Muhl.**] Big Flats, West Hill, 20 Jul 1882, 373 (ECH).
- Chimaphila umbellata* (L.) Bart.—Mt Zoar Hill, 10 Jul 1892, 497 (ECH).
- Epigaea repens* L.—Lowman's Swamp, 28 Apr 1895, *Pat. no. 6600* (F); [Lowman's Swamp], in old cool woods, 30 Apr 1896, *Heller no. 9423* (F); Wilks Jenkins Swamp, 23 Apr 1882, 147 (ECH).
- Gaultheria procumbens* L.—Sullivan Hill, 18 Jul 1895, 173 (ECH).
- Gaylussacia baccata* (Wangehn.) K. Koch—[**syn: Gaylussacia resinosa Torr. & A. Gray**] N side Sullivan Hill, in woods and thickets, 1 Aug 1896, 326 (ECH); near Seeley Creek, EER Bridge, in woods and thickets preferring sandy soil, 24 May 1896, 326 (ECH).
- Kalmia latifolia* L.—[**syn: Kalmia latifolia Linn.**] northern slopes of hills, frequent, 8 Jun 1896, *Pat. no. 6616* (F); Hedy Creek, 15 Jun 1886, 49 (ECH).
- Lyonia ligustrina* (L.) DC.—[**syn: Andromeda ligustrina Muhl.**] near Lowman's Swamp, 29 Jun 1879, 116? (OS)
- Monotropa uniflora* L.—Southport, South Hill, 6 Jul 1889, 5215

(BUF); Sullivan Hill, 1 Aug 1896, *s.n.* (BUF); Southport, South Hill, 6 Jul 1889, 398 (ECH).

Orthilia secunda L.—[**syn: Pyrola secunda L.**] Sullivan Hill, 9 Jul 1880, *s.n.* (BUF); same old woods, 16 Jun 1896, *s.n.* (?); Elmira, Sullivan Hill, 24 Sep 1878, *Cat. no.1733* (BUF); Sullivan Hill, in rich evergreen woods, 9 Jul 1880, 660 (ECH).

* *Pterospora andromedea* Nutt.—**NY Rarities - E3**; SE of Fitch's Bridge, 28 Jul 1892, 992 (BUF).

Pyrola chlorantha Sw.—Sullivan Hill, in evergreen woods, 9 Jul 1882, 5222 (BUF).

Pyrola elliptica Nutt.—Sullivan Hill, 3 Jul 1879, 717 (ECH).

Pyrola rotundiflora L.—Elmira, Mt Zoar Hill woods, near Tremain's, 10 Jul 1892, *s.n.* (BUF); Mt Zoar Hill, 10 Jul 1892, 158 (ECH).

Rhododendron periclymenoides (Michx.) Shinners—[**syn: Rhododendron nudiflorum (L.) Torr.**] upland woods, 25 May 1897, *s.n.* (BUF); Horseheads, 26 May 1893, 266 (ECH).

Rhododendron prinophyllum (Small) Millais—[**syn: Azalea nudiflora L.**] upland woods, 26 May 1896, *Pat. no. 6667* (F); upland woods, 25 May 1897, *Pat. no. 6667* (F).

Vaccinium angustifolium Aiton—[**syn: Vaccinium pennsylvanicum Lam.**] Elmira, Mt Zoar Hill, 3 May 1894, *s.n.* (BUF, US); Elmira, woods top of Water Cure Hill, 21 May 1900, 1403 (ECH, BH, BUF, US); Hedy Creek, dry hills, 15 May 1887, 223 (ECH).

Vaccinium pallidum Aiton—[**syn: Vaccinium vacillans Solander**] Mt Zoar Hill, dry and sandy woodlands and rocky places, 25 May 1894, *Pat. no. 6711* (OS); Hedy Creek, Southport, dry places, woods, 24 May 1887, 334 (ECH).

Vaccinium stamineum L.—Sullivan Hill, dry woods, ravine banks, 4 Jun 1887, 243 (ECH).

Indet.—Elmira, Water Cure Hill, 4 Jun 1900, 1416 (ECH, BH, BUF, NY, US); Mountain House Narrows, 6 Jun 1898, *s.n.* (ECH, BH, BUF, NY, MO, US).

Euphorbiaceae

Acalypha rhomboidea Raf.—[**syn: Acalypha virginica L.**] Valley of the Chemung, woods and thickets, 2 Sep 1898, 619 (ECH); Elmira, 10 Aug 1887, 619 (ECH).

Acalypha virginica L.—waste places, fields, 10 Aug 1895, *s.n.* (F).

Chamaesyce hypericifolia (L.) Millsp.—[**syn: Euphorbia hypericifolia L.**] near Pest House, D.L.&W. railroad, 12 Aug 1897, *s.n.* (BH, BUF, US).

Chamaesyce maculata (L.) Small—[**syn: Euphorbia maculata L.**] Decker's Cove, Harrington Island, fields and roadside, no date, 610 (ECH).

Chamaesyce nutans (Lag.) Small—[**syn: Euphorbia nutans Lag.**] Harrington Island, 4 Sep 1895, 962 (ECH).

Chamaesyce vermiculata (Raf.) House—[**syn: Euphorbia vermiculata Raf.**] Elmira; along N.C. railroad above the shops, in dry gravelly soil, 20 Aug 1897, 6370 (ECH).

Euphorbia corollata L.—Elmira, 11 Jul 1892, 339 (ECH).

Euphorbia cyparissias L.—Southport, along roads near fences, 7 Jun 1887, *Oyster no. 7561* (BUF); Ashland, Fruit Homestead, 1 Jun 1879, 2473 (BUF, US); Harrington's Farm, near mill, roadside, 23 May 1899, 1221 (BUF, US); Southport, 7 Jun 1887, 616 (ECH).

Euphorbia sp.—N.C. railway, above shops, woods, 20 Aug 1897, *s.n.* (BUF); Elmira along N.C. railroad, 1897, *s.n.* (ECH).

Fagaceae

Castanea dentata (Marsh.) Borkh.—[**syn: Castanea sativa Mill var. americana**] Elmira, Mt Zoar Hill, woods, 6 Jul 1893, *s.n.* (BUF, US); Elmira, rocky woods and ravines, 25 Jul 1882, 152 (ECH).

Fagus grandifolia Ehrh. subsp. *grandifolia*—[**syn: Fagus americana (Per.) Sweet**] on Dry Run, in rich soil, 8 Sep 1897, 452 (ECH); Town of Erin, in cold soil, rich, slopes, 16 May 1880, 452 (ECH).

Fagus grandifolia Ehrh.—[**syn: Fagus ferruginea Aiton**] Baldwin

Creek, 2 Jun 1880, *s.n.* (?); up Dry Run, 8 Sep 1897, *s.n.* (BH, BUF, US); Erin, cool woods, fruiting, 2 Jun 1880, 16 May 1880, *Cat. no.2600* (BUF); N Chemung, 26 May 1879, *Cat. no.2600* (BUF).

Quercus alba L.—Elmira, Mt Zoar Hill, this side of Rutan's, 23 May 1893, *s.n.* (?); upland, roadside, 26 May 1900, 1410 (BUF, US); Water Cure Hill, roadside, 21 May 1900, 1404 (BUF, US); Elmira, 17 May 1887, *s.n.* (BH, BUF, US); Elmira, Mt Zoar Hill, this side of Rutan's, in all soils, 17 May 1896, *s.n.* (BUF); Elmira, woods, hills, etc., 17 May 1887, 263 (ECH); Lowman's Swamp, in moist swampy soil, 4 Jun 1897 1079 [p.p.] (ECH).

Quercus bicolor Willd.—[**syn: Quercus platanoideis Willd.**] Lowman's Swamp, 28 Aug 1888, *s.n.* (BUF); Lowman's Swamp, in moist swampy soil, 4 Jun 1897, 1079 [p.p.] (ECH).

Quercus coccinea Muench.—Fitch's Bridge, banks of the Chemung River, in dry soil, 5 Oct 1895, *s.n.* (BUF).

Quercus ilicifolia Wang.—[**syn: Quercus nana (Marsh) Sarg.**] Mountain House Narrows, 9 Aug 1898, *s.n.* (BUF, BH, ECH); Sullivan Hill, rocky, dry hill, 28 May 1882, 366 (ECH).

Quercus macrocarpa Michx.—Big Island, on rich alluvial soil, 21 Jun 1882, 849 (ECH).

Quercus michauxii Nutt.—[**syn: Quercus prinus L.**] Mountain House Narrows, 9 Aug 1898, *s.n.* (BUF, US).

Quercus montana Willd.—Sullivan Hill, in dry soil, 9 May 1895, 1150 (ECH); Old Mountain House Narrows, in dry soil, 2 Aug 1896, 1150a (ECH); head of Christian Hollow, in dry soil, 2 Jun 1897, 628 (ECH).

Quercus muehlenbergii Engelm.—[**syn: Quercus acuminata (Michx.) Houba, Quercus prinus L. var. acuminata Michx.**] Pine City, head of Christian Hollow, 2 Jun 1897, *s.n.* (BUF); Ashland, Fruit Homestead, 2 Jun 1882, *Cat. no. 2593* (BUF).

Quercus prinoides Willd.—near Red School House up river, warm, dry and rocky soil, 2 May 1897, *s.n.* (BUF); Pickaway, 21 May 1897, *s.n.* (?); Sullivan Hill, May 1879, *s.n.* (BKL); Sullivan Hill, in dry sandy or rocky soil, 21 May 1897, 367a (ECH); ravine above Mountain House Narrows, in dry sandy or rocky soil, 2 Sep 1897, 367 (ECH).

Quercus rubra L.—Fitch's Bridge, banks of the river, 5 Oct 1895, *s.n.* (BUF, BH, ECH); over East Hill, [illeg.] right hand of old road, 16 May 1894, *s.n.* (BUF, US); Elmira, in rich and [] soil, 16 May 1894, 627 (ECH).

Quercus velutina Lam.—[**syn: Quercus coccinea Muench., Quercus coccinea Wang. var. tinctoria A. Gray**] Sullivan Hill, on knob, 3 Jun 1894, *s.n.* (?); East Hill, woods on hills, 19 May 1897, 632 (ECH); near Old Bridge, inlet opposite Reservoir, 29 May 1898, *s.n.* (BUF, US); East Hill, roadside right hand side going, 19 May 1893, *Cat. no. 632*, (BH, BUF, US); over East Hill, along road, 9 Oct 1893, *s.n.* (?); [East Hill], upland in dry soil, 5 Oct 1897, *s.n.* (BH, BUF, US); Sullivan Hill, dry hill, 2 Jun 1882, 501 (ECH).

Fumariaceae

Adlumia fungosa (Aiton) Greene—Elmira, Rorick's Glen, rocky ledge, 28 Aug 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); Elmira, Rorick's Glen, 17 Sep 1897, *s.n.* (?).

Dicentra canadensis (Goldie) Walp.—[**syn: Bicuculla canadensis (Goldie) Millsp.**] Elmira, Rorick's Glen, rocky ledge, 7 May 1897, *s.n.* (ECH, BH, BUF, US); Elmira, near Rorick's Glen, 11 May 1888, *s.n.* (ECH, BH, BUF, US); Elmira, Rorick's Glen, rocky ledge, 7 May 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US).

Gentianaceae

Gentiana andrewsii Griseb.—N side of Sullivan Hill, near Tremain Farm, in moist soil, 13 Sep 1895, 1045½ (ECH).

Gentiana clausa Raf.—[**syn: Gentiana andrewsii Griseb.**] on Ridge Road south of Millsport, near small stream, infrequent, 16 Aug 1898, *Heller no.9726* (F); Ashland Flats, moist ground, 15 Sep 1884, 920 (ECH).

Gentianella quinqueflora (L.) Small—[**syn: Gentiana quinqueflora Lam.**] Ashland Flats, Sep 1884, *s.n.* (BUF); Ashland, Chemung Flats, 15 Sep 1884, 5487 (BUF); Sullivan Hill, 6 Sep 1897, *s.n.* (BUF, US); between Horseheads & Millport, on Ridge Road, 16 Aug 1898, *s.n.* (BH, BUF, US); Levy Road, 20 Sep 1896, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); Mt Zoar Hill, wet gravelly banks, 20 Sep 1896, 138 (ECH); Elmira, Sullivan Hill, 12 Sep 1879, 2240 (BUF); Elmira, Levy Road & Mt Zoar, 20 Sep 1896, *Cat. no.138c* (BUF, US); Levy Road Hill, near Fitches Bridge, 5 Oct 1895, 2240 (?).

Geraniaceae

Geranium carolinianum L. var. *confertiflorum* Fernald—5th Ward, barren soil and waste places, 16 Jun 1886, 701 (ECH).

Geranium maculatum L.—on Dry Run, in woods, 11 Jun 1898, 459a (ECH); Ashland, low woods, hedges, etc., 5 Jun 1882, 459 (ECH).

Geranium robertianum L.—Lowman's Swamp, in low moist shady places, 30 May 1880, 30 (ECH).

Grossulariaceae

Ribes americanum Mill.—[**syn: Ribes floridum L'Her.**] Baldwin, 27 May 1882, 27 (ECH).

Ribes aureum Pursh—Ashland, 7 May 1880, 257 (ECH)

Ribes cynosbati L.—Mt Zoar Hill, 28 May 1893, 444 (ECH).

Ribes rotundifolium Michx.—Mt Zoar Hill, 9 May 1895, 669 (ECH)

Ribes rubrum L.—near Seeley Creek Bridge, 1895, 6 (ECH).

Ribes triste Pallas—[**syn: Ribes rubrum L. var. subglandulosum Maxim.**] Greatsinger's Swamp, 27 May 1882, 544 (ECH).

Hamamelidaceae

Hamamelis virginiana L.—Mt Zoar Hill, 9 Oct 1893, 429 (ECH).

Hippocastanaceae

Aesculus glabra* Willd.—NY Rarities - T-3**; near Pine Valley, 3 May 1897, *s.n.* (ECH).

Hydrangeaceae

§*Hydrangea arborescens* L.—(State: E; TNC Rank G5 S1) Wellsburg Narrows, cool rivers, frequent, 2 Jul 1896, *s.n.* (BUF); Wellsburg Narrows, cool rivers, frequent, 2 Jul 1896, *Heller no.5490* (F); Wellsburg Narrows, 26 Jul 1892, 711 (ECH).

Hydrangea arborescens L. var. *oblong* Torr. & A. Gray—(State: E; TNC Rank G5 S1) ravine W of Old Mountain House, cool rocky ledges, 5 Aug 1896, 711 (ECH).

Hydrophyllaceae

Hydrophyllum canadense L.—Harrington's Island, 26 Jun 1885, *s.n.* (BUF); Harrington's Island, 26 Jun 1885, 370 (ECH).

Hydrophyllum virginianum L.—[**syn: Hydrophyllum virginicum L.**] no location, 31 May 1899, 1228 (BH, BUF, US); Elmira, garden, 19 Jun 1899, *s.n.* (BUF, US); Chemung River, 21 Jun 1882, *Cat. no. 2122* (BUF, US); rich woods, 11 Jun 1894, *s.n.* (BUF); Harrington's Island, 26 Jun 1884, 480 (ECH).

Hypericaceae

Hypericum ascyron L.—by Miller's Pond near railroad, banks of streams, rich soil, 5 Aug 1897, *s.n.* (BUF, US); Elmira, Arnot's Canal, along the Chemung River, 24 Jul 1887, *s.n.* (BH, BUF, US); Fitches Bridge, 21 Jul 1884, *s.n.* (BUF, US); Old Chemung Canal, 24 Jul 1887, 509 (ECH).

Hypericum ellipticum Hook.—Eldridge Park, 25 Aug 1895, 715 (ECH).

Hypericum matitum L.—Lowman, 4 Aug 1882, 411 (ECH).

Hypericum perforatum L.—Miller's Pond, 5 Aug 1897, *s.n.* (ECH, BH, BUF, NY, US); Valley of the Chemung, 30 Jun 1879, 267 (BUF); Ashland, Fruit Homestead, 1 Jul 1882, 267 (?); near Harrington Ford, 3 Jul 1893, *s.n.* (BUF); [Mt Zoar / Levy Hill Road], 18 Aug 1894, 153a (ECH); Ashland, 3 Jul 1893, 153 (ECH).

Hypericum punctatum Lam.—[**syn: Hypericum maculatum Walt.**]

E of Elmira, Old Canal, 12 Aug 1897, *s.n.* (BUF, US); Elmira, Rorick's Glen, 14 Jul 1893, *s.n.* (BH, BUF, US); N Chemung, roadside, 17 Jul 1896, *s.n.* (BUF, US); near Kr[ans?] Farm, roadside, 23 Jun 1896, *s.n.* (BUF, US); near Tremain's, 27 Jul 1898, *s.n.* (BUF, US); Miller's Pond, 5 Aug 1897, *s.n.* (BUF); Sullivan Hill, 8 Jul 1876, *s.n.* (BUF); above Mountain House, 2 Sep 1897, *s.n.* (BUF); Sullivan Hill, 18 Jul 1895, *s.n.* (BUF, US); Elmira, Mt Zoar Hill, near Fitch's Bridge, 28 Jul 1892, *s.n.* (BUF, US); Big Flats, 5 Aug 1896, *s.n.* (BUF, US); Mt Zoar Hill, 28 Jul 1892, 511 (ECH).

Iridaceae

Iris versicolor L.—marshes, 15 Jun 1896, 2847 (?); Elmira, Arnot's Canal, 16 Jun 1884, 2851 (BUF); Big Flats, Old Canal Bed, 6 Jun 1898, *s.n.* (BUF, US); Horseheads & Pine Valley, between, 15 Jun 1894, 2847 (BUF, US); Between Pine Valley & Horseheads, 15 Jun 1894, 387 (ECH).

Sisyrinchium angustifolium Mill.—[**syn: Sisyrinchium anceps Cav.**] Seeley Creek, ERR Bridge, 24 Jun 1898, 53a (ECH); Sullivan Hill, 3 Jun 1894, 53 (ECH).

Sisyrinchium bermudiana L.—Sullivan Hill, 18 Jun 1882, *Cat. no 2860* (BH, BUF, US).

Sisyrinchium mucronatum Michx.—[**syn: Sisyrinchium angustifolium Mill.**] [near upper Reservoir], meadows and roadsides, 29 May 1898, *Heller no 2852* (F).

Sisyrinchium sp.—Elmira, near Upper Reservoir, 29 May 1898, *s.n.* (BUF, US).

Juglandaceae

Carya cordiformis (Wangenh.) K. Koch—[**syn: Carya amara Nutt.**] Elmira, Water St, woods above fairgrounds, 5 Jun 1894, 1021 (BUF, US); Chemung River, 4 Jun 1883, 1021 (ECH).

Carya glabra (Mill.) Sweet—[**syn: Carya microcarpa Nutt., Carya porcina Nutt.**] Chemung River, "on Choncy Decker," 21 Jun 1882, *Cat. no.2567* (BUF); Sullivan Hill, 4 Jun 1882, 2570 (BUF, US); Big Island, 21 May 1887, *s.n.* (BUF); Ashland, along the Chemung River, on alluvial river banks, 29 May 1889, *s.n.* (ECH, BH, BUF, NY, MO, US); no location, Jun 1895, *s.n.* (BKL); near Rorick's Glen, 7 Jun 1888, 368 (ECH).

Carya glabra (Mill.) Sweet var. *glabra*—Elmira, Hug Hollow, 25 May 1881, 2570 (US); Ashland, bank of the Chemung River on Choncy Decker, 21 Jun 1882, 2567 (US).

Carya ovata (Mill.) Koch—East Hill Rd, 19 May 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); Ashland, Fruit Homestead, tree in gully, 16 Jun 1882, 2566 (BUF); Wilk's Gorge, 29 May 1887, *s.n.* (BH, BUF, US); near Wellsburg, on road to [] above Baptist Church, 23 May 1897, *s.n.* (BUF).

Carya tomentosa (Poir. ex Lam.) Nutt.—[**syn: Carya alba Nutt.**] near Mountain House, river, 2 Sep 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); Mountain House Narrows, hybrid?, 17 May 1896, 9662 (BUF); Hedy Creek, 24 May 1887, 237 (ECH).

Juglans cinerea L.—near Mountain House, 17 May 18[], 7497 (BUF); Big Island, 13 May 1894, *s.n.* (BH, BUF, US); Harrington's Island, 3 Jun 1887, 7497 (BUF); above Horseheads, 7 Jul 1898, *s.n.* (?); Big Island, Chemung River, 13 May 1894, 458 (ECH).

Juglans nigra L.—Big Island, Chemung River, 15 May 1887, *s.n.* (ECH).

Juncaceae

Juncus acuminatus Michx.—over East Hill, 17 Aug 1897, *s.n.* (BUF); Baldwin Creek, no date, 1116½ (ECH).

Juncus bufonius L.—East Hill, roadside, 17 Aug 1897, *s.n.* (BUF); Hulbert's Farm, 6 Jul 1894, 1025 (ECH).

Juncus effusus L.—Elmira, marsh, 8 Aug 1892, *s.n.* (BUF); river below woods, 29 Jun 1898, *s.n.* (BH, BUF, US); Woolen Mill, 8 Aug 1892, 390 (ECH).

Juncus filiformis L.—in south wood above woolen mills [at foot of Water Cure Hill], marsh, 8 Aug 1892, *s.n.* (BUF, US); Arnot's Canal, 7 Jul 1882, *Cat. no. 2972* (BUF).

Juncus tenuis Willd.—Elmira, garden, 3 Aug 1898, *s.n.* (ECH, BH, BUF, NY, US); Ashland, Fruit Homestead, 29 Jun 1882, *Cat. no. 2985* (BUF, US); Sullivan Hill, 8 Jul 1896, *s.n.* (BUF, US); Elmira, 20 Jun 1886, 468 (ECH).

Luzula acuminata Raf.—Baldwin Creek, 10 May 1895, 667 (ECH).

Luzula campestre (L.) DC.—Jenkin's Woods (Elmira), 2 May 1899, 1192 (ECH, BH, BUF, NY, US); Jenkin's Woods, 9 May 1898, *s.n.* (BH, BUF, NY, US); Elmira, Mt Zoar Hill, 13 Jun 1897, *s.n.* (BUF); Botany Swamp, 15 May 1897, *s.n.* (BUF, US).

Luzula campestre (L.) DC. var. *multiflora* (Retz.) Lej.—[**syn: Luzula multiflora (Ehrh.) Lej**] Botany Swamp, Elmira, 15 May 1897, 681 (ECH).

Lamiaceae

Agastache scrophulariifolia (Wild.) Kuntze—[**syn: Lophanthus scrophulariaefolium Benth., Vlechia scrophulariaefolia Raf.**] borders of thickets, 9 Aug 1891, *s.n.* (BUF); no location, 9 Aug 1896, *Pat. no. 8552* (ABSL); near Rorick's Glen, rich soil, borders of woods, 9 Aug 1887, 549 (ECH).

Clinopodium vulgare L.—[**syn: Calamintha clinopodium Benth.**] near Pine Valley, 27 Jun 1896, *s.n.* (BUF); on Baldwin Creek, 7 Jul 1889, *s.n.* (BUF); Sullivan Hill, in woods and thickets, 15 Jul 1882, 386 (ECH).

Collinsonia canadensis L.—Sullivan Hill, 29 Jul 1895, *s.n.* (BUF); Cobble Hill, 21 Aug 1898, *s.n.* (BUF, US); Cobble Hill, Collin Simon's canal, 12 Aug 1892, *s.n.* (BUF); near Sullivan Hill, 1 Aug 1896, *s.n.* (ECH, BH, BUF, MICH, MO, NY, US); Elmira, over Water Cure Hill, woods, 19 Jul 1896, *s.n.* (BUF, US); near Rorick's Glen, rich moist woods, 9 Aug 1887, 201 (ECH).

Galeopsis tetrahit L.—Elmira, Rorick's Glen, moist waste places, 29 Jul 1888, *s.n.* (BUF); Harrington's Island, 22 Jul 1884, *s.n.* (?); Elmira, Rorick's Glen, marsh moist places, 19 Aug 1888, *s.n.* (BUF); Rorick's Glen, waste places near streams, 19 Aug 1888, 160 (ECH).

Glechoma hederacea L.—[**syn: Nepeta glechoma Benth.**] Lowman's Cove, 23 May 1882, 2047 (BUF); Big Island, 13 May 1894, *s.n.* (BUF); Harrington's Island, 3 Jun 1883, 2047 (BUF); Harrington Island, damp or shady places, 3 Jun 1883, 438 (ECH).

Hedeoma pulegioides Pers.—Sullivan Hill, 27 Jul 1898, *s.n.* (ECH, BH, BUF, US); Sullivan Hill, 30 Sep 1894, 137 (ECH).

Lamium amplexicaule L.—Elmira, garden, 11 Aug 1897, 260c (BUF); Elmira, garden, 17 May 1898, *s.n.* (ECH, BH, BUF, MO, NY, US); Elmira, 14 Jun 1884, 260 (ECH).

Leonurus cardiaca L.—Elmira, garden, 29 Jun 1893, *s.n.* (?); Ashland, 15 Jul 1882, 6746 (BUF); near Riverside Park, 19 Jul 1898, *s.n.* (BUF); Elmira, garden, 19 Jun 1899, 1292 (ECH, BH, BUF, NY, US); Elmira, gardens, waste places, 29 Jun 1893, 505 (ECH); near Riverside Park, Elmira, 19 Jul 1898, 505 (ECH).

Lycopus americanus Muhl. ex W.P.C. Barton—[**syn: Lycopus sinuatus Ell.**] opposite Fruit Homestead, Chemung River, 14 Jul 1897, *s.n.* (BUF); Lowman's, Swamp, 4 Aug 1882, *s.n.* (BUF); no location, 14 Jul 1897, *Heller no. 10782* (F); Lowman, 4 Aug 1882, 893 (ECH).

Lycopus virginicus L.—Lowman, 4 Aug 1882, 1989 (BUF); Harrington's Ford, 20 Aug 1890, *s.n.* (?); no location, 20 Aug 1893, *Heller no. 10783* (F); Harrington's Ford, Ashland, 20 Aug 1890, 110 (ECH).

Mentha canadensis L.—Ashland, Lowman, Baldwin Creek, 4 Aug 1882, 1988 (BUF, US); [Baldwin Creek], 4 Aug 1882, *Heller no. 10792* (F); Baldwin Creek, 4 Aug 1882, 109 (ECH).

Mentha spicata L. subsp. *spicata*—[**syn: Mentha viridis (L.) L.**] along creek, West Hill, 17 Aug 1888, 113 (ECH); Big Flats, West Hill, 17

Aug 1888, *s.n.* (BUF, US); Elmira Heights, 19 Jul 1899, 1305 (ECH, BH, BUF, NY, US); no location, 17 Aug 1893, *Heller no. 10801* (F).

Mentha × piperita L.—[**Mentha aquatica × spicata**] Hendy Creek, 16 Sep 1893, 515 (ECH); Hendy Creek, 16 Sep 1893, *s.n.* (BUF); no location, 16 Sep 1893, *Heller no. 10798* (F).

Monarda clinopodia L.—[**“sororia” variant?**] [near Pickaway], along streams, 30 Jul 1897, 8582 (F); along the Chemung River, in ravines and shade, 9 Aug 1898, *Heller no. 10812* (F).

Monarda clinopodia L.—Big Flats, above No.6 School House, ravine, 9 Aug 1898, 993 (?); Elmira, near college, on upper Chemung River, 30 Jul 1897, *s.n.* (BUF); [near Mountain House Narrows], along streams, 9 Aug 1898, 993 (ECH, BH, BUF, US); along Baldwin Creek, in shade, frequent, 17 Jul 1896, 8582 (F); Chemung River opposite Bohemia, 30 Jul 1897, 993 (ECH).

Monarda didyma L.—on Baldwin Creek, 7 Jul 1889, *s.n.* (BUF); Elmira, over Water Cure Hill, along small run flowing into Baldwin Creek, 19 Jul 1896, *s.n.* (BUF, US); Pine City, up Dry Run, along streams, 8 Sep 1897, 272 (BH, BUF, US); along streamlets, in shade, 19 Jul 1896, *Heller no. 10814* (F); along small tributary to Baldwin Creek, in shade, frequent, 19 Jul 1896, 272a (ECH, F).

Monarda fistulosa L.—[**syn: Monarda fistulosa L. var. mollis (L.) Benth.**] beyond Old Mountain House, 3 Aug 1899, 1314 (ECH); by Mountain House, 3 Aug 1899, 1314 (BUF, US); near Mountain House, 3 Aug 1899, 1313 (ECH, BH, BUF, US); Elmira, Rorick's Glen, 30 Jun 1881, 6692 (BUF); Elmira, Chemung Valley, 19 Aug 1879, *s.n.* (BUF); near Mountain House, 3 Aug 1897, *s.n.* (BH, BUF, US); above Mountain House Narrows, 15 Jul 1895, *s.n.* (BUF, US); Old Mountain House Narrows, dry soil, roadside, 15 Jul 1895, 112a (ECH).

Monarda media Willd.—[**syn: Monarda fistulosa L. var. media (Willd.) A. Gray**] Chemung River near Pickaway, 30 Jul 1897, 1064 (ECH); opposite Bohemia, 30 Jul 1897, 1064 (BUF).

Nepeta cataria L.—Wellsburg woods, 6 Jul 1895, *s.n.* (BUF, US); roadside to Wellsburg, near dwellings, 6 Jul 1895, 161 (ECH).

Physostegia virginiana (L.) Benth. subsp. *virginiana*—[**syn: Physostegia virginiana (L.) Benth. var. speciosa (Sweet) A. Gray**], crossroad above Horseheads, 16 Aug 1898, *Cat. no. 1152* (ECH, BH, BUF, MICH, MO, NY, NYS, US); on a crossroad above Horseheads, in moist soil, 16 Aug 1898, 1152 (ECH).

Prunella vulgaris L.—[**syn: Brunella vulgaris L.**] Elmira, near fairgrounds, woods, 6 Jul 1884, *s.n.* (BUF, US); Horseheads, woods and field, 28 Jul 1884, 86 (ECH); Cobble Hill, 12 Aug 1892, 6751 (ECH, BH, BUF, MO, NY, US); Horseheads, woods above Fairgrounds, 13 Jul 1884, *s.n.* (BUF).

Pycnanthemum incanum (L.) Michx.—Mountain House Narrows, 9 Aug 1898, *s.n.* (BUF, US); Mountain House Narrows, 2 Sep 1897, *s.n.* (BUF, US); Narrows above Old Mountain House, 13 Aug 1887, 734 (ECH).

Pycnanthemum virginianum (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald—[**syn: Koellia lanceolata Pursh**] bank of Chemung River, opposite Fruit Homestead, along streams, 14 Jul 1897, *s.n.* (BUF, US); along streams, 23 Aug 1891, *s.n.* (?); Chemung River above Harrington Ford, 10 Aug 1883, 735 (ECH).

Scutellaria galericulata L.—Elmira, rip rapids along the Chemung River, 30 Aug 1882, *s.n.* (ECH, BH, BUF, US); along Newtown Creek, above Woolen Mill, 11 Jul 1896, *s.n.* (BH, BUF, US); Horseheads, Newtown Creek, 28 Jul 1885, *s.n.* (BUF); along Chemung River, Ashland, border of marshes, rivers, 30 Aug 1882, 861 (ECH).

Scutellaria lateriflora L.—low grounds, 20 Aug 1891, *s.n.* (BUF, US); Harrington's Ford, 1890, 108 (ECH)

Stachys aspera Michx.—near Harrington's Ford, low wet ground, alluvial, 3 Jul 1893, 417 (ECH).

- Teucrium canadense* L.—Ashland, Fruit Homestead, 6 Aug 1879, 1975 (BUF, US); near Pest House, 12 Aug 1897, *s.n.* (BUF).
- Teucrium canadense* L. var. *virginicum* (L.) D.C. Eaton—along the Chemung River, in moist thickets or along banks, 29 Jul 1893, 167a (ECH).
- Teucrium occidentale* A. Gray—[**syn: Teucrium canadense L.**] Germond—Ashland, low ground, along streams, 6 Aug 1879, 167 (ECH).
- Lauraceae**
- Lindera benzoin* (L.) Blume—Horseheads, above, low, open woods, 16 Aug 1898, *s.n.* (BUF); Lowman's Swamp, 22 Sep 1897, *s.n.* (BUF, US); Veteran, 7 Jun 1897, *s.n.* (BUF, US); [Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (BUF, US); swampy woods, 22 Apr 1897, *s.n.* (BUF); on Baldwin Creek, 19 May 1897, *s.n.* (ECH, BH, BUF, US); Jenkin's Woods, 9 May 1898, *s.n.* (BUF).
- Sassafras albidum* (Nutt.) Nees—[**syn: Sassafras officinale Nees**] Elmira, Water Cure Hill, 14 May 1900, 1398 (BUF); Ashland, southern hillsides, 11 May 1887, *s.n.* (BUF, US); up Latty Brook, 13 May 1898, *s.n.* (?).
- Leguminosae**
- Amphicarpa bracteata* (L.) Fernald—[**syn: Amphicarpaea monoica (L.) Nutt., Amphicarpaea pitcheri Torr. & A. Gray, Flacata pitcheri (Torr. & A. Gray) Kuntze**] Hendy Creek, 5 Sep 1885, *s.n.* (BH, BUF, US); Sullivan Hill, Sep 1883, 673 (BUF); Near Harrington Ford, Chemung River bank, 19 Aug 1896, *s.n.* (BUF); Hendy Creek, Southport, 5 Sep 1885, 171 (ECH); bank of Chemung Canal by Harrington's Ford, 1896, 1065 (ECH).
- Amphicarpaea* sp.—left of Water Cure Hill above Stone Quarry, woods, 30 Aug 1896, *s.n.* (BUF).
- Apios americana* Medik.—[**syn: Apios tuberosa Moench.**] Ashland, along the Chemung River, 24 Aug 1878, 662 (BUF); Newtown Creek, Horseheads, 2 Sep 1885, 656 (ECH).
- Astragalus* sp.—S side of river above Fitch's Bridge, 17 Aug 1896, *s.n.* (BUF, US); Ashland, opposite Fruit Homestead, Chemung River banks, 19 Aug 1896, *s.n.* (ECH, BH, BUF, MO, NY, US).
- Caragana arborescens* Lam.—Elmira, So. Elm St, 11 May 1895, *s.n.* (BUF, US).
- Cercis canadensis* L.—Elmira, Fulton St, 4 May 1896, *s.n.* (BUF).
- Chamaecrista fasciculata* (Michx.) Greene—[**syn: Cassia chamaechrista L.**] Elmira, Southport Switchyard of Erie railroad, on bank, 19 Aug 1900, 1429 (ECH, BH, BUF, MO, NY, US).
- Coronilla varia* L.—Horseheads & Pine Valley, between, 7 Jul 1898, *s.n.* (BUF, US); Millport, derelict garden, 1 Jul 1893, 999 (ECH).
- Desmodium canadense* DC.—Ashland, along the Chemung River, 12 Aug 1882, 612 (BUF, US); Ashland, opposite Searles, along the Chemung River, 19 Aug 1896, *s.n.* (BH, BUF, US); Cobble Hill, 12 Aug 1892, *s.n.* (BUF); Mountain House Narrows, 2 Aug 1896, *s.n.* (BH, BUF, US); Chemung River, 7 Aug 1882, *s.n.* (BUF); Ashland, Fruit Homestead, banks of the Chemung River, 19 Aug 1879, 612 (BUF); along the Chemung River, Ashland, along river, on alluvial, 20 Jul 1887, 747 (ECH).
- Desmodium dillenii* Darl.—Sullivan Hill, no date, *s.n.* (?); Sullivan Hill, 29 Jul 1895, 628 (?); Sullivan Hill, 6 Aug 1882, 628 (BUF); below Lowman on knoll, 11 Sep 1898, *s.n.* (BUF, US); Sullivan Hill, 29 Jul 1895, *s.n.* (?); Sullivan Hill, 18 Jul 1895, *s.n.* (BUF); Sullivan Hill, upland woods, 30 Jul 1897, *s.n.* (BUF); Lowman, 11 Sep 1898, *s.n.* (BUF).
- Desmodium glutinosum* (Willd.) Alph. Wood—[**syn: Desmodium acuminatum DC.**] Elmira, Rorick's Glen, 14 Jul 1893, *s.n.* (BUF); Sullivan Hill, 6 Aug 1882, 611 (BUF); Sullivan Hill, 29 Jul 1895, *s.n.* (BUF); Sullivan Hill, 22 Jul 1877, 611 (ECH, BH, BUF, US); Southport, 16 Jul 1887, 1795 (BUF); Sullivan Hill, 6 Aug 1882, 611 (?); Sullivan Hill, 27 Jul 1898, *s.n.* (BUF, US); Cobble Hill, Chemung Valley, rich woods, 12 Aug 1892, 132 (ECH); Mt Zoar Hill, 10 Jul 1892, 132 (ECH).
- Desmodium marilandicum* (L.) DC.—[**syn: Desmodium marilandicum F. Boott.**] Ashland, Sullivan Hill, 15 Aug 1880, 622 (BUF); Sullivan Hill, 18 Jul 1895, *s.n.* (BUF); Sullivan Hill, Ashland, 29 Aug 1887, 785 (ECH).
- Desmodium nudiflorum* DC.—Sullivan Hill, 1 Aug 1896, *s.n.* (?); Southport, frequent on hills, 16 Jul 1887, *s.n.* (BUF); near Mrs. Crane's woods, 30 Aug 1896, *s.n.* (BUF); Sullivan Hill, 29 Aug 1887, *s.n.* (?); Sullivan Hill, frequent on hills, 1 Sep 1880, *s.n.* (BUF, US); Southport, 16 Jul 1887, 421 (ECH).
- Desmodium paniculatum* DC.—[**syn: Meibomia paniculata (L.) Kuntze**] Sullivan Hill, woods and ravines, 29 Jul 1895, 547 (ECH); Sullivan Hill, 29 Jul 1895, *s.n.* (BUF).
- Desmodium paniculatum* (L.) DC. var. *paniculatum*—[**syn: Meibomia dillenii (Darl.) Kuntze**] Sullivan Hill, N side, in open woodlands, 27 Jul 1895, 790 (ECH).
- Desmodium rotundifolium* DC.—Sullivan Hill, Ashland, dry stony woods, 29 Aug 1887, 600 (ECH).
- Desmodium* sp.—Sullivan Hill, 27 Jul 1898, *s.n.* (BH, BUF, US); Sullivan Hill at the base, 17 Aug 1897, *s.n.* (ECH, BH, BUF, US).
- Gleditsia triacanthos* L.—Elmira, cultivated, 7 Jun 1887, *s.n.* (BUF); Elmira, rich woods, 7 Jun 1887, 688 (ECH)
- Lathyrus ochroleucus* Hook.—Water Cure Hill, 4 Jun 1900, 1414 (BUF); Sullivan Hill, 18 Jun 1882, *Cat. no. 653* (BH, BUF, US); Mt Zoar Hill, in moist elevated woodlands, Jul 1898, 34a (ECH); Mt Zoar Hill, in moist elevated woodland, 28 May 1893, 34 (ECH).
- Lespedeza capitata* Michx.—Big Flats, suspension bridge, 13 Aug 1887, 1936 (BUF); Elmira, 17 Aug 1896, *s.n.* (?); Ashland, 10 Aug 1883, *s.n.* (BUF); Big Flats, near suspension bridge, dry and sandy soil, 13 Aug 1887, 134a (ECH).
- Lespedeza frutescens* (L.) Hornem.—Sullivan Hill, south side, in dry shaded woods, 31 Aug 1880, 961 (BUF); Ashland, Sullivan Hill, Fruit Homestead, 31 Aug 1880, 981 (BUF).
- Lespedeza hirta* Elliott subsp. *hirta*—[**syn: Lespedeza polystachya Michx.**] ravine W of Old Mountain House, Big Flats, dry hills, 2 Aug 1896, 200a (ECH); Big Flats, near No. 6 school house, 9 Aug 1898, *s.n.* (BH, BUF, US); near Red School House, up river, 2 Aug 1896, *s.n.* (BUF, US).
- Lespedeza intermedia* (S. Watson) Britton—[**syn: Lespedeza reticulata Pers.**] Sullivan Hill, Ashland, dry shady hill woods, 1887, 961 (ECH).
- Lupinus perennis* L.—Sullivan Hill, southern face, 3 Jun 1894, *s.n.* (BUF, US); near Clemen's House, East Hill, woods, 29 May 1896, *s.n.* (ECH, BH, BUF, US); Sullivan Hill, in dry woods on hills, 26 May 1879, 648 (ECH).
- Medicago lupulina* L.—Elmira, banks of the Chemung River, 11 Jul 1884, *s.n.* (BUF, US); Fitch's Bridge, 21 Jul 1884, *s.n.* (BUF, US); Fitches Bridge, Southport, waste places, near towns, 21 Jul 1886, 915 (ECH).
- Meibomia nudiflorum* (L.) DC.—Sullivan Hill, in dry hilly woods, 13 Sep 1895, 421a (ECH).
- Melilotus alba* Desr. ex Lam.—Ashland, Rorick's Glen, 14 Jul 1893, *Cat. no. 547* (BUF, US); Ashland, opposite Fruit Homestead, Chemung River, 14 Jul 1897, *s.n.* (BH, BUF, US); Rorick's Glen, along and near water, 14 Jul 1893, 290 (ECH).
- Melilotus altissima* Thuill.—D.L.&W. crossing near Arnot's Mill, in low waste grounds, 24 Jun 1883, 902 [p.p.] (ECH).
- Melilotus officinalis* (L.) Pallas—Botany Swamp, 20 Jul 1892, 1468 (BUF, US); Elmira, eastern environs, 26 Jun 1883, *s.n.* (BUF, US); Elmira, waste grounds, 2 Aug 1897, *s.n.* (BUF, US); D.L.&W. RR crossing near Arnot's Mill, in low waste grounds, 24 Jun 1883, 902 [p.p.] (ECH).
- Robinia pseudo-acacia* L.—Turks Hill [Sullivan Hill?], along road, 3

- Jun 1894, *s.n.* (BUF, US); below Elmira, along Old Canal, 12 Jun 1893, *s.n.* (BUF); Ashland, Fruit Homestead, 16 Jun 1882, *Cat. no.575* (BUF, US); on Seeley Creek, 6 Jun 1900, 1423 (ECH, BH, BUF, MO, NY, US); Ashland, Fruit Homestead, 16 Jun 1882, 575 (BUF); near Arnot's Mill, Elmira, low banks, 3 Jun 1894, 38 (ECH).
- Trifolium arvense* L.—Ashland, 10 Aug 1883, *Cat. no. 536* (?); Ashland, Fruit Homestead, 23 Oct 1873, *Cat. no. 536* (?); Ashland, on dry warm soil, hillsides, 10 Aug 1883, 566 (BUF); Ashland, Fruit Homestead, 3 Aug 1879, *Cat. no.536* (ECH, BH, BUF, US); Sullivan Hill, 1 Aug 1896, *s.n.* (?); Sullivan Hill, 8 Jul 1896, *s.n.* (ECH, BH, BUF, US); Sullivan Hill, old field, dry hill, 6 Aug 1882, 559 (ECH).
- Trifolium aureum* Pollich—[**syn: Trifolium agrarium L.**] Hug Hollow, roadside, 23 Jun 1884, *s.n.* (BUF, US); East Hill, woods, 27 Jun 1894, *s.n.* (BUF, US); Hulbert's Farm, roadside near G.W., 22 Jun 1894, *s.n.* (BUF, US); near Hug Hollow, 8 Jul 1896, *s.n.* (BUF, US); Chemung, 14 Sep 1882, *Cat. no.543* (?); Chemung, along roadside and in waste places, 14 Sep 1882, 543 (BUF); Elmira on road to Lowman, field and roadside, 23 Jun 1884, 722 (ECH).
- Trifolium hybridum* L.—roadside, 4 Jun 1899, 1239 (BUF, US); Water Cure Hill, roadside, 15 Jun 1898, 506 (ECH).
- Trifolium pretense* L.—Elmira, garden, 29 Jun 1893, *s.n.* (?); Elmira, garden, 21 Jun 1889, *s.n.* (BUF, US); Elmira, garden, 29 Jun 1893, *Cat. no.270c* (BUF); Elmira, gardens, fields, meadows, 29 Jun 1893, 270 (ECH).
- Trifolium repens* L.—Elmira, garden, 5 Jul 1893, *Cat. no.40c* (BUF); Elmira, garden, cultivated grounds, 5 Jul 1893, *s.n.* (BUF, US); Elmira, gardens, field & copses, 5 Jul 1893, 40 (ECH).
- Trifolium* sp.—foot of Latty Brook Hill, 22 Jun 1897, *s.n.* (BUF, US).
- Vicia americana* Muhl. ex Willd.—Lowman's Flats, roadside, 22 Jun 1894, *s.n.* (BH, BUF, US); Pine City, up Dry Run, 11 Jun 1898, *s.n.* (BUF, US); Hill above Carr's Corner, woods, 2 Jun 1896, *s.n.* (BUF); Sullivan Hill, 3 Jun 1896, *s.n.* (BUF); Chemung River, towpath, 8 Jun 1879, *Cat. no. 646* (BUF, US); Ashland, along the Chemung River, on alluvial moist soil, 28 May 1882, 682 (ECH); Harrington's Ford, on alluvial moist soil, 3 Jul 1893, 682a (ECH).
- Vicia caroliniana* Walt.—near Red School House, woods and banks, 16 May 1897, *s.n.* (BH, BUF, US); Elmira, 5 May 1882, *s.n.* (BUF); Lowman's Swamp, 23 May 1880, *s.n.* (BUF); Ashland, Fruit Homestead, 15 Jul 1882, 1948 (?); Sullivan Hill, river banks & cliffs, 28 May 1882, 644 (BUF, US); Sullivan Hill, 28 May 1882, 1948 (BUF, US); Ashland, Sullivan Hill, ravines and hillsides, 28 May 1882, 28 (ECH).
- Vicia cracca* L.—Ashland, Fruit Homestead, 9 May 1878, 643 (BUF)
- Vicia* sp.—Horseheads, Latty Brook Hill, 22 Jun 1897, *s.n.* (BUF).
- Indet.—Elmira, garden, 4 Oct 1896, 888a (BUF); Elmira, Upper Reservoir, in back of reservoir, 29 May 1898, *s.n.* (BH, BUF, US).
- Liliaceae**
- Allium canadense* Kalm.—bank of Chemung River, Ashland, moist meadows, 21 Jun 1882, 850 (ECH).
- § *Allium cernuum* Roth.—**State: T; TNC G5 S1S2**; old Mountain House narrows, on rocky dry banks and hillside, 9 Aug 1898, 299 (ECH); Sullivan Hill, on dry warm hills, 6 Aug 1882, 299 (ECH).
- Asparagus officinalis* L.—Old Canal Bed, low ground, escaped, 6 Jun 1892, 467 (ECH).
- § *Chamaelirium luteum* (L.) A. Gray.—**State: T; TNC G5 S2**; [**syn: Chamaelirium carolinianum Willd.**] Jenkin's Farm, swamp on farm, 20 Jun 1880, 47a (BUF); Wilks Jenkins Farm, Blazing Star Swamp, woods and damp spots, 12 Jun 1880, 47 (ECH).
- Clintonia borealis* (Aiton) Raf.—Lowman's Swamp, cold moist woods or swamps, 30 May 1897, 483 (ECH).
- Erythronium americanum* Ker.—Big Island, rich alluvial ground, 26 Apr 1897, 212 (ECH).
- Hemerocallis flava* (L.) L.—near Pine Valley, old deserted gardens, 19 Jun 1897, *s.n.* (ECH); on the Wellsburg Road, roadside escaped, 2 Jul 1896, 76 (ECH)
- Hyopis hirsute* (L.) Coville—[**syn: Hypoxis erecta L.**] Sullivan Hill, 9 Jul 1882, *s.n.* (BH, BUF, US).
- Lilium canadense* L.—along Chemung River, on alluvial only, frequent, 27 Jul 1893, *Pat. no. 10409* (F); along Baldwin Creek, meadows and alluvial, 14 Jul 1881, 397 (ECH).
- Lilium lancifolium* Thunb.—[**syn: Lilium tigrinum L.**] on Middle Road between Horseheads and Millport, roadside, 16 Aug 1898, 75 (ECH).
- Lilium philadelphicum* L.—woods and thickets, 24 Jun 1896, *Heller no. 2608* (F); dry upland woods, 27 Jun 1896, *Pat. no. 10420* (F); Mt Zoar Hill, dry hilly wood, 10 Jul 1892, 74 (ECH).
- Lilium superbum* L.—along Chemung River, S[latius] infrequent, 31 Jul 1897, *Heller no 2610* (F); along Chemung River opposite "Bohemia," 30 Jul 1897, 548 (ECH).
- Maianthemum canadense* Desf.—Hendy Creek, Southport, moist ravines and woods, 20 Jun 1896, 36 (ECH).
- Maianthemum racemosum* L.—[**syn: Smilacina racemosa Desf., Vagnera racemosa (L.) Morong., Veratrum viride Aiton**] Hug Hollow, ravines and woods, 20 Jun 1884, 360 (ECH); Sullivan Hill, in moist upland woods, 18 Jul 1895, 360 (ECH); Greatsinger's Corner, Jenkin's Woods, swamps and low grounds, 8 Jun 1894, 764 (ECH).
- Medeola virginiana* L.—beechwood on Dry Run, damp woods, swamps, 20 Jun 1896, 676 (ECH).
- Polygonatum commutatum* (Schult. f.) A. Dietr.—[**syn: Polygonatum giganteum A. Dietr.**] Banks of the Chemung River, meadows and river banks, 11 Jun 1894, 921 (ECH).
- Polygonatum pubescens* (Willd.) Pursh—[**syn: Polygonatum biflorum Ell.**] Mt Zoar Hill, mainly in rich upland woods, 16 Jun 1896, 48 (ECH); Rorick's Glen, wooded hillsides, 7 Jun 1888, 48 (ECH).
- Streptopus roseus* Michx.—Jenkin's Woods, cold damp woods, 14 May 1896, 478 (ECH); in moist rich woods, Jul 1886, 478 (ECH).
- Trillium erectum* L.—Lowman's Swamp, rich low woods, 7 May 1889, 15a (ECH); [Rorick's Glen], in damp rich woods, 7 May 1897, *Heller no 2669* (F); Lowman's Swamp, rich low woods, 8 May 1880, 15 (ECH).
- Trillium grandiflorum* (Michx.) Salisb.—[Jenkin's Woods], 9 May 1898, 2670 (F); Erin, rich woods, 16 May 1890, 37 (ECH).
- Trillium undulatum* Willd.—cold damp woods, frequent, 10 May 1896, *Pat. no. 10514* (F); moist woods and swamps, frequent only at station, 19 May 1897, *Pat. no. 10514* (F); marsh on Baldwin Creek, in wet woodland swamps, 19 May 1897, 477 (ECH).
- Uvularia grandiflora* Smith—[**syn: Uvularia perfoliata L.**] Valley of the Chemung, in moist rich woods and thickets, 1 Jul 1886, 31 (ECH); along a run, W of Old Mountain House, in rich moist wood, 6 May 1896, 1047 (ECH).
- Uvularia perfoliata* L.—near Seeley Creek Bridge, rich woods, 25 May 1884, 31 (ECH).
- Uvularia sessilifolia* L.—[**syn: Oakesia sessilifolia Watson**] Greatsinger's Swamp, low woods, ravines, 27 May 1882, 435 (ECH).
- Zigadenus elegans* Pursh subsp. *glauca* (Nutt.) Hulten—sandy bog, 19 Jul 1882, *s.n.* (BUF).
- Linaceae**
- Linum usitatissimum* L.—near D.L.&W. railroad tracks, opposite Fruit Homestead, 19 Aug 1896, *s.n.* (BUF); along D.L.&W. railroad, Harrington Ford, along roadside, railways and in waste places, 19 Aug 1896, 912 (ECH).
- Malvaceae**
- Abutilon abutilon* (L.) Shafer—[**syn: Abutilon abutilon (L.) Rusby**] between Pine City & Elmira, on the Plank Road, roadside, 8 Sep

1897, 416a (BUF, ECH); on the Plank Road between Pine City & Elmira, waste places and roadside, 8 Sep 1897, 416a (ECH).

Abutilon theophrasti Medik.—[**syn: Abutilon avicennae Gaertn.**], Ashland, along Baldwin Creek, along road, 15 Aug 1880, *Cat. no. 416* (BUF, ECH); Ashland, along Baldwin Creek, along road, 15 Aug 1880, 416a (US); no location, Sep 1897, *s.n.* (BKL); along Baldwin Creek, along roads, 15 Aug 1880, 416 (ECH).

Hibiscus trionum L.—Fruit Homestead, 5 Sep 1882, 395 (BUF); Alfred Searles Farm, cultivated ground, 2 Sep 1882, 570 (ECH).

Malva moschata L.—Ashland, Fruit Homestead, 23 Jun 1879, *Cat. no. 360* (BUF); near Erin, 21 Jul 1898, *s.n.* (BUF, US); Pine City, near Dry Run, roadside, 8 Sep 1897, *s.n.* (BUF, US); Southport, road to Pine City, roadsides and fields, 20 Jun 1884, 523 (BUF, US, ECH); South Creek, 6 Jul 1885, *s.n.* (BUF, US).

Malva neglecta Wallr.—Elmira, garden, 3 Oct 1887, 250 (ECH).

Malva pusilla Sm.—[**syn: Malva rotundifolia L.**] Elmira, 1887, 250 (ECH).

Menispermaceae

Menispermum canadense L.—no location, Jun 1896, *s.n.* (BKL).

Molluginaceae

Mollugo verticillata L.—Ashland, 4 Aug 1879, *Cat. no. 347* (BUF, US); along the Chemung River, shores near water, not frequent, 28 Jul 1888, 624 (ECH).

Moraceae

Morus alba L.—Lowman's Swamp, 7 Jun 1887, 7469 (BUF); Lowman's Swamp, 7 Jun 1887, 7706 (BUF); Horseheads, Latty Brook, 22 Jun 1897, *s.n.* (BUF, US); half mi up Latty Brook Road, roadside, 22 Jun 1897, 946 (ECH).

Myricaceae

Comptonia asplenifolia Aiton—Elmira, East Hill, 28 Apr 1880, 7566 (?).

Comptonia peregrina (L.) Coult.—[**syn: Myrica asplenifolia Endl.**] near Rorick's Glen, on hills, dry soil, 7 May 1897, *s.n.* (BUF); East Hill near Elmira, in dry soil on hillside, 28 Apr 1880, 899 (ECH).

Najadaceae

Najas (Naias) flexilis Rostk. & Schmidt—Chemung River near head of Harrington Island, in ponds and streams, 15 Jul 1888, 966½ (ECH).

Nyssaceae

Nyssa sylvatica Marshall var. *biflora* (Walter) Sarg.—[**syn: Nyssa biflora Walt.**] East Elmira, Sep 1896, *s.n.* (BKL).

Oleaceae

Chionanthus virginicus L.—near Pine Valley, escaped, 14 Jun 1894, *s.n.* (?); Pine Valley, 14 Jun 1899, 1229 (ECH, BH, BUF, MICH, MO, NY, NYS, US); near Pine Valley, escaped, 19 Jun 1897, *s.n.* (BUF); near Pine Valley, along streams and moist tickets, 15 Jun 1894, 1023 (ECH).

Fraxinus americana L.—[Rorick's Glen], upland woods, 7 May 1897, *s.n.* (?); near Lowman's Swamp, upland woods, 17 Aug 1897, *s.n.* (BUF); Elmira, Water Cure Hill, 14 May 1900, 1400 (BUF); Ashland, rich moist woods, 2 May 1897, 451 [p.p.] (ECH); Lowman's Swamp, swamps and wet banks, 11 May 1887, 854 (ECH).

Fraxinus nigra Marshall—[**syn: Fraxinus sambucifolia Lam.**] Lowman's Swamp, 20 May 1880, 5275 (BUF); Lowman's Swamp, 8 May 1887, *s.n.* (?); tree on road to Millsburg, near Sam Mitchell's old residence, 7 May 1889, *s.n.* (BUF); swampy woods, 20 Jun 1896, *s.n.* (BUF, US).

Fraxinus pennsylvanica Marshall—[**syn: Fraxinus pubescens Lam., Fraxinus viridis Michx. f.**] Ashland, opposite Fruit Homestead, Chemung River, 14 Jul 1897, 1172 (ECH, BH, BUF, NY, MO, US); East Elmira, Old Canal, 9 Sep 1894, *s.n.* (BUF); Elmira, near Pest House, Old Canal Bed, 12 Aug 1897, *s.n.* (BH, BUF, US); Lowman's

Swamp, 28 Aug 1888, *s.n.* (BUF); along Chemung River, Decker's Cove, low ground, alluvial soil, 11 May 1887, 851 (ECH); Ashland, rich moist woods, 2 May 1897, 451 [p.p.] (ECH).

Fraxinus sp.—tree on Tuthill, one near Arnot's Mill, 6 May 1886, *s.n.* (BUF).

Onagraceae

Circaea alpina L.—Lowman's Swamp, cool deep woods and swamps, 3 Jul 1881, 420 (ECH).

Circaea quadrisulcata Maxim. var. *canadensis* (L.) Hara—[**syn: Circaea lutetiana L.**] Rorick's Glen, damp woods, 14 Jul 1893, 393 (ECH).

Epilobium angustifolium L.—Baldwin, on newly cleared land, 7 Jul 1889, 155 (ECH).

* *Epilobium ciliatum* Raf.—[**syn: Epilobium adenocaulon Hausskn.**] NY Rarities - T3; 8th Ward, cultivated ground, in moist ground, 19 Jul 1898, 1142 (ECH).

Epilobium coloratum Muhl.—Old Canal, East Elmira, wet places, low ground, 16 Aug 1885, 282 (ECH).

Gaura biennis L.—along Chemung River, sandy shores or dry banks, 30 Aug 1882, 728 (ECH).

Ludwigia palustris (L.) Ell. var. *americana* (DC.) Fern. & Griseb.—Baldwin Creek, ditches, low ground, 4 Aug 1882, 807 (ECH).

Oenothera biennis L. var. *nutans* (Athinks & Bart.) Wiegand—Ashland, low ground, 14 Aug 1888, 871 (ECH).

Oenothera pumila L.—along South Creek, wet pastures and roadsides, 6 Jul 1885, 653 (ECH).

Oenothera tetragona Roth var. *longistipata* (Pennell) Munz—[**syn: Oenothera fruticosa L.**] South Creek, on dry slopes, sterile soil, 5 Jul 1885, 95 (ECH).

Orchidaceae

Aplectrum hyemale (Muhl. ex Willd.) Nutt.—Vaughn, Devine's Woods, 4 Jun 1896, *s.n.* (BUF).

Corallorhiza maculata (Raf.) Raf.—Southport, woods, 10 Jul 1892, 985 (BUF).

Cypripedium acaule Aiton—Elmira, Mt Zoar Hill, 11 Jun 1896, *s.n.* (BUF); Baldwin Creek, near/on, low woods, 19 May 1897, *Heller no. 2888* (BUF, F); Lowman's Swamp, rich moist woods, 23 May 1880, 170 (ECH).

* *Cypripedium arietinum* R. Br.—**Recommended High Priority**; cold damp woods, 16 Jun 1894, *s.n.* (BUF).

Cypripedium parviflorum Salisb.—Elmira, Mt Zoar, woods, 13 Jun 1897, *s.n.* (ECH, BH, BUF, NY, US); [near upper Reservoir], in upland woods, 29 May 1898, *Heller no. 2896* (F); near Elmira, upper woods, not frequent, 29 May 1896, *Pat. no. 10027* (F); Sullivan Hill, bogs & low woods, 18 Jun 1882, 19 (ECH).

Cypripedium parviflorum Salisb. var. *parviflorum*—no location, May 1896, *s.n.* (BKL).

Cypripedium parviflorum Salisb. var. *pubescens* (Willd.) O.W. Knight—[**syn: Cypripedium calceolus L. var. pubescens (Willd.) Correll, Cypripedium pubescens Willd.**] Sullivan Hill, 13 Jun 1886, *s.n.* (BUF, US); Sullivan Hill, no date, *s.n.* (?); Elmira, Mt Zoar Hill, woods, 28 May 1893, *s.n.* (BUF); Sullivan Hill, moist upland woods, 18 Jun 1882, 2822 (BUF); Mt Zoar Hill, woods and swamps, 10 Jun 1886, 18 (ECH).

Galearis spectabilis (L.) Raf.—[**syn: Orchis spectabilis L.**] Chemung River, in rich alluvial bank of the Chemung River, rare, 21 May 1897, 341 (ECH, BH, BUF, MICH, MO, NY, US).

Goodyera pubescens (Willd.) R.Br.—Fitch's Bridge, near, wet dry woods, 28 Jul 1892, 540b (BUF); Elmira, Mt Zoar Hill, 28 May 1893, *s.n.* (BUF); South Mountain, infrequent, 8 Aug 1885, *s.n.* (BUF); Sullivan Hill, Jul 1898, *s.n.* (BUF, US); Sullivan Hill, Ashland, in old woods, rich and shady, 29 Jul 1895, 1038½ [p.p.] (ECH).

Goodyera repens (L.) R. Br.—[**syn: Goodyear repens (L.) R. Br. var.**

ophiodes Fernald, *Peramium repens* (L.) Salisb. Lowman's Swamp, 12 Jul 1878, 1038½ (BUF).

Goodyera tessellata Lodd.—Sullivan Hill, Ashland, in old woods, rich and shady, 29 Jul 1895, 1038½ [p.p.] (ECH).

Habenaria viridis (L.) R. Br. var. *bracteata* (Muhl.) Gray—[**syn: *Habenaria bracteata* (Willd.) R. Br.**] right hand side of road before Hendy Creek Road, in woods and meadows, 28 May 1893, 1000 (ECH).

§ *Liparis lilifolia* (L.) L. Rich. ex Ker Gawl.—[**syn: *Leptorchis lilifolia* (L.) Kuntze**] State: T/E; TNC Rank: G5 S2; Orchid Glen, East Hill, cool ravine, 22 Jun 1898, 1135 (BUF); near East Hill, Stone Quarry, 9 Jun 1898, s.n. (BUF); "Orchid Glen" near Elmira, only station in flora, 22 Jun 1898, *Heller no. 3054* (F); "Orchid Glen," moist rocky ledge in ravine, 22 Jun 1898, 1135 (ECH).

Liparis loeselii (L.) L. Rich.—Wellsburg Narrows, moist ledges of the W. Narrows, amongst moss, 4 Jul 1881, 795 (ECH).

Orchis spectabilis (L.) Raf.—[**syn: *Orchis spectabilis* L.**] Hendy Creek, Rich woods, 20 Jun 1886, 341 (ECH).

Platanthera grandiflora (Bigelow) Lindl.—[**syn: *Habenaria fimbriata* (Aiton) R. Br., *Habenaria grandiflora* (Bigel.) Torr.**] near Van Etten's, old woods, 13 Jun 1899, 1262 (ECH, BH, BUF, NY, MO, US); Jenkin's Woods, Greatsinger's Corner, in cold rich low woods in mud, 20 Jun 1896, 470a (ECH).

§ *Platanthera hookeri* (Torr. ex A. Gray) Lindl.—[**syn: *Habenaria hookeri* (Torr. ex A. Gray) Lindl. var. *oblongifolia* (Paine) A. Gray, *Habenaria hookeriana* Torr.**] State: E; TNC Rank G5 S1S2; near Latty Hill Road, woods, 16 Jun 1896, s.n. (BH, BUF, US); [Mt Zoar Hill], 16 Jun 1896, 984 (BUF); Sullivan Hill, 22 Jun 1879, 699 (?); [Mt Zoar Hill], in arid old upland woods, 16 Jun 1896, *Heller no. 3303* (F); Mt Zoar Hill, elevated woods, high woods, top of hills, 16 Jun 1896, 699a (ECH).

Platanthera psychodes (L.) Lindl.—[**syn: *Habenaria psychodes* A. Gray**] Sullivan Hill, 18 Jun 1882, s.n. (BUF); Lowman's Swamp, 3 Jul 1881, s.n. (BUF); Lowman's Swamp, meadows and bogs, 6 Jul 1879, 781 (ECH).

Spiranthes cernua (L.) L. Rich.—[**syn: *Gyrostachys cernua* (L.) Kuntze**] Lowman's Swamp, Sep 1897, s.n. (BH, BUF, US); Lowman's Swamp, wet grassy places and swamps, 22 Sep 1897, 141 (ECH).

Orobanchaceae

Epifagus virginiana (L.) Bartr.—[**syn: *Leptamnium virginianum* (L.) Raf.**] Lowman's Swamp, under bushes in beechwoods, 22 Sep 1897, 1121 (ECH).

Oxalidaceae

Oxalis florida Salisb.—[**syn: *Oxalis corniculata* L. var. *stricta* Sav.**] Sullivan Hill, fields, dry woods, 18 Jun 1882, 239 (ECH).

Oxalis montana Raf.—[**syn: *Oxalis acetosella* L.**] Greatsinger's Corner & Tompkins Co., deep, cold woods and ravines, Jul 1887, 465 (ECH).

Papaveraceae

Chelidonium majus L.—to Pine City, roadside, 11 Jun 1898, s.n. (ECH, BH, BUF, NY, US).

Sanguinaria canadensis L.—Ashland, Chemung River, banks, 21 May 1882, 117 (BUF, US); Ashland, Chemung River, banks, 5 May 1880, 117 (BH, BUF, US); Harrington's Island, 7 May 1888, s.n. (BUF); Big Island, 15 May 1887, s.n. (BUF, US).

Phytolaccaceae

Phytolacca americana L.—[**syn: *Phytolacca decandra* L.**] hill above N Chemung, beechwood, 17 Jul 1896, s.n. (ECH, BH, BUF, US); Chemung, low grounds, new soil, 18 Jul 1880, 309 (ECH).

Pinaceae

Juniperus virginiana L.—on rocks at Chemung Narrows, in dry soil, hillsides or rocky slopes, 23 Apr 1880, 964 (ECH).

Larix laricina (Du Roi) K. Koch—[**syn: *Larix americana* Michx.**] a low swale, mile below Lowman, in cold swamps, 29 Apr 1880, s.n. (ECH).

Pinus resinosa Aiton—[near Mountain House Narrows], on rocky slopes, 9 Aug 1898, 339 (NY); Hendy Creek, "root farm," dry woods and [dedi], 24 May 1887, s.n. (ECH).

Pinus rigida Mill.—no location, Sep 1896, s.n. (BKL); Sullivan Hill, May 1880, s.n. (BKL); East Hill, hills, dry barren soil, May 1896, 563 (ECH); Chemung Co., 25 May 1894, *Pat. no. 9972* (E).

Pinus strobus L.—Hendy Creek, hills and woods, 7 Jun 1887, s.n. (ECH).

Tsuga canadensis Carr.—on cold soil, ravines and swampy woods, 12 Jun 1887, s.n. (ECH).

Plantaginaceae

Plantago lanceolata L.—Southport, on Seeley Creek, 11 Jun 1897, 1785 (BUF, US); Sullivan Hill, 18 Jun 1882, *Cat. no. 1785* (BUF); Ashland, Fruit Homestead, 18 Jul 1879, s.n. (BUF); Sullivan Hill, fields and roadsides, 18 Jun 1882, 274 (ECH).

Plantago rugelii Decsne.—Elmira, garden, roadside, etc., 1 Jul 1895, 1028 (ECH); Elmira, garden, 1 Jul 1895, s.n. (BUF).

Platanus occidentalis L.—Seeley Creek, 6 Jun 1900, 426 (ECH, BH, BUF, MO, US); Big Island, common, 15 May 1887, 7494 (BUF, US); along the Chemung River, alluvial, mainly near streams, 15 May 1887, 219 (ECH).

Poaceae

Agropyron trachycaulum (Link.) Steud. var. *glaucom* (Pease & Moore) Malte—[**syn: *Agropyron caninum* (L.) Roem. & Schult.**] Sullivan Hill, on high wooded hills, 7 Jul 1895, 1033 (ECH).

Agrostis perennans (Walt.) Tuckerm.—Sullivan Hill, old wood road, 6 Sep 1897, s.n. (ECH, BH, BUF, US); Greatsinger's Corner, swampy woods, moist woods and ravines, 6 Jul 1895, 1030 (ECH).

Agrostis scabra Willd.—Sullivan Hill, dry or moist soil, 29 Jul 1895, 1038 (ECH).

Andropogon gerardii Vitman—[**syn: *Andropogon furcatus* Muhl., *Andropogon provincialis* Lam.**] Cobble Hill, 21 Aug 1898, s.n. (ECH, BH, BUF, NY, US); Elmira, stone quarry east of city, in a dry rocky elevated woods, 1896, s.n. (ECH, BH, BUF, US); above Stone Quarry, woods near Mrs. Cranes, 30 Aug 1896, s.n. (ECH, BH, BUF, MICH, MO, NY, NYS, US); Harrington Island, on bank below Decker's Ford, 4 Sep 1895, s.n. (?); Harrington's Island, dry banks and sterile soil, 4 Sep 1895, 1043 (ECH).

Anthoxanthum odoratum L.—Seeley Creek railroad bridge, near knoll, 24 Jun 1898, s.n. (BUF, US); knoll near Seeley Creek RR Bridge, meadows ad pastures, May 1895, 945 (ECH).

Avena sativa L.—Chemung River, banks, 12 Aug 1897, s.n. (BUF); bank of Chemung River, escaped from cultivation, waste places and fields, etc., 12 Aug 1897, 1114 (ECH).

Brachyelytrum erectum (Schreb.) P. Beauv.—[**syn: *Brachyelytrum aristatum* (Michx.) Trel.**] woods beyond Water Cure Hill, rocky woods, 7 Jul 1892, 983 (ECH).

Bromus ciliatus L.—Elmira, in Rorick's Glen, low damp elevations, as on islands, 17 Sep 1897, s.n. (BUF, US); Harrington's Ford, 20 Aug 1890, s.n. (BUF, US).

Bromus ciliatus L. var. *intonsus* Fernald—swamp near Woodlawn Cemetery, Elmira, river banks & moist woodland, 17 Aug 1884, 863 (ECH).

Bromus kalmii A. Gray—[**syn: *Bromus ciliatus* L. var. *purgans* (L.) A. Gray**] Harrington's Ford, 20 Aug 1890, s.n. (BUF); Sullivan Hill, elevated dry rocky woods, 7 Jul 1895, s.n. (BUF, US); Sullivan Hill, hilly woods, 27 Jul 1898, 1032 (BUF, US); Sullivan Hill, 7 Jul

- 1895, *s.n.* (BUF); woods over East Hill, above road, 27 Jun 1894, *s.n.* (BUF); Harrington Island, river banks and moist woodland, 22 Jul 1884, 1062 (ECH); Sullivan Hill, Elmira, on rocky wooded hills, 7 Jul 1895, 1032 (ECH).
- Bromus pubescens* Muhl. ex Willd.—elevated rich woods, 24 Jun 1895, *s.n.* (BUF); no location, 1 Aug 1896, *s.n.* (BUF); Elmira, near Water Cure Hill, woods, 7 Jul 1892, *s.n.* (?); Elmira, over Water Cure Hill, woods, 19 Jul 1896, *s.n.* (?); hill woods, 1 Aug 1896, *Pat. no.* 11805 (MO).
- Bromus secalinus* L.—above Horseheads, 26 Jun 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); Horseheads, roadside above town, 26 Jun 1897, *s.n.* (BUF); roadside above Horseheads, fields and waste places, 26 Jun 1897, 607 (ECH).
- Bromus* sp.—Elmira, Rorick's Glen, 17 Sep 1897, *s.n.* (BUF); between Horseheads & Pine Valley, 4 Jun 1899, 1247 (ECH, BH, BUF, US); Elmira, Woodlawn Cemetery, swamp near cemetery, 17 Aug 1884, *s.n.* (BUF, US).
- Calamagrostis canadensis* (Michx.) Beauv.—Elmira, Eldridge Lake, 25 Aug 1895, *s.n.* (BUF); Horseheads, wet grounds and open marshes, 20 Jul 1884, 931 (ECH).
- **Calamagrostis porteri* A. Gray—**NY Rarities -T3**; Sullivan Hill, 7 Jul 1882, 1039 (BUF); dry woods top of Sullivan Hill, 29 Jul 1895, *Pat. no.* 11850 (MO); Sullivan Hill, dry woods, 29 Jul 1895, 1039 (ECH, CONN).
- Catabrosa aquatica* (L.) Beauv.—[**syn: Glyceria aquatica (L.) J. Presl & C. Presl**] McAllister's Lake, 20 Jul 1888, *s.n.* (BUF).
- Cinna arundinacea* L.—Big Island below Elmira, moist woods and swamps, 11 Aug 1898, 1140 (ECH).
- Dactylis glomerata* L.—Elmira, fields and yards in shade, 15 Jun 1892, 948 (ECH).
- Danthonia spicata* (L.) P. Beauv. ex Roem. & Schult.—Elmira, Mt Zoar Hill, dry hills, 5 Jul 1885, *Cat. no.* 923 (BUF, US); Mt Zoar Hill, dry and sterile or rocky soil, 5 Jul 1885, 923 (ECH).
- Deschampsia flexuosa* (L.) Trin.—woods above the steep hill road, Fitches Bridge, dry places, hills, 6 Jul 1893, 1004 (ECH).
- Digitaria sanguinalis* (L.) Scop.—[**syn: Panicum sanguinale L.**] Elmira, garden, 4 Sep 1899, 1354 (BH, BUF, US).
- Eatonia dudleyi* Vasey—Sullivan Hill, dry open woods, 16 Jun 1884, 879 (ECH).
- Echinochloa crus-galli* (L.) P. Beauv. var. *mitis* (Pursh) Petern.—[**syn: Panicum crus-galli L., Panicum crus-galli L. var. muticum Torr.**] Veteran, roadside, 16 Aug 1895, 1153 (ECH); Elmira, garden, 17 Aug 1899, 1334 (ECH, BH, BUF, US); by G. [illeg.], Ridge Road, 16 Aug 1898, *s.n.* (BUF, US); [Elmira], cultivated and waste grounds, 4 Aug 1892, *s.n.* (BUF); Elmira, garden, 4 Aug 1892, 553 (ECH).
- Elymus canadensis* L.—[**syn: Elymus canadensis L. f. glaucifolium (Muhl.) Fernald**] Harrington's Ford, 20 Aug 1890, *s.n.* (BUF); Chemung River, East Canal, banks, 14 Aug 1896, *s.n.* (BUF); Harrington's Ford, 20 Aug 1890, *s.n.* (BUF); river banks, 19 Aug 1896, *s.n.* (BUF); along the Chemung River, river banks, 19 Aug 1896, 550 (ECH).
- Elymus canadensis* L. var. *glaucifolium* (Willd.) Torr.—along Chemung River, Ashland, river banks, 20 Aug 1890, 550a (ECH).
- Elymus caninus* (L.) L.—[**syn: Agropyron caninum (L.) Roem. & Schult.**] Elmira, crest of Mt Zoar, 20 Jul 1897, 1033 (ECH, BH, BUF, US).
- Elymus hystrix* L.—[**syn: Asprella hystrix (L.) Willd.**] near Mountain House, 9 Aug 1898, *s.n.* (BUF); Elmira, near curve in road, head of Levy Hill, Mt Zoar, woods, 18 Aug 1894, *s.n.* (BUF, US); Elmira, woods above fairgrounds, 28 Aug 1884, *s.n.* (BUF); woods around curve of Levy Hill Road, Fitches Bridge, moist woods, 18 Aug 1894, 810 (ECH).
- Elymus repens* (L.) Gould.—[**syn: Agropyron repens (L.) P. Beauv.**] [Elmira], cultivated grounds; damp soil, 30 Jun 1892, *s.n.* (BUF, US); Harrington's Ford by Old Canal, along Delaware, Lackawanna & Western railroad, 14 Jul 1897, *s.n.* (BUF, US); Elmira, cultivated grounds and fields, 30 Jun 1892, 883 (ECH); along D.L.&W. railroad of Harrington's Ford, field and waste places, railroads, 14 Jul 1897, 883a (ECH).
- Elymus virginicus* L. var. *hirsutiglumis* (Scribn.) Hitchc.—Harrington's Ford, along Chemung River, dry banks of ravines, 20 Aug 1890, 775 (ECH).
- Eragrostis cilianensis* (All.) Vign. ex Janchen.—[**syn: Eragrostis major Host**] Horseheads, 11 Aug 1896, *s.n.* (BUF); Horseheads, 11 Aug 1896, *s.n.* (UMO-UMO19506); streets of Horseheads, sandy waste places, 11 Aug 1896, 1063 (ECH).
- Festuca elatior* L.—Elmira, garden, 30 Jun 1892, 873 (ECH).
- Festuca obtusa* Spreng.—[**syn: Festuca nutans Willd.**] Mt Zoar Hill, Elmira, rocky upland woods & copses, 10 Jul 1892, 978 (ECH).
- Festuca pratensis* Huds.—[**syn: Festuca elatior L. var. pratensis Vasey, Schedonorus pratensis (Huds.) P. Beauv.**] Seeley Creek, ERR Bridge, fields, pastures, moist soil, 24 Jun 1898, 873a (ECH); Elmira, Jun 1896, *s.n.* (BKL).
- Festuca paradoxa* Desv.—[**syn: Festuca nutans Spreng.**] Elmira, Mt Zoar Hill, 7 Jul 1889, *s.n.* (BUF).
- Glyceria arundinacea* Kunth—Old People's Home, swamp near home, 9 Jul 1884, *s.n.* (BUF).
- Glyceria fluitans* (L.) R.Br.—[**syn: Panicularia fluitans (L.) Kuntze**] Van Etten Swamp, 13 Jun 1899, 1283 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Botany Swamp, 20 Jul 1892, *s.n.* (BUF); Van Etten's Swamp, Van Etten, in swamps, wet places or in water, 13 Jun 1899, 1283 (ECH).
- Glyceria grandis* S. Watson—Elmira, by Old People's Home, swamp & wet ground, 9 Jul 1884, 973 (ECH).
- Glyceria* sp.—Baldwin Creek, near house, 7 Jul 1889, 1283 (BUF).
- Glyceria stricta* (Lam.) Hitchc.—[**syn: Glyceria nervata (Willd.) Trin.**] Elmira, Water Cure Hill, 7 Jul 1892, *s.n.* (ECH, BH, BUF, NY, US); River road, roadside, 23 Jun 1884, *s.n.* (?); river bed below woods, where Jen taught, 29 Jun 1898, *s.n.* (ECH, BH, BUF, NY, US); over East Hill, 6 Jun 1896, *s.n.* (BUF); wood beyond Water Cure, moist woodland, 7 Jul 1892, *s.n.* (ECH); Water Cure Hill, moist meadows, marshes, 7 Jul 1892, 957 (ECH).
- Helictotrichon sempervirens* (Vill.) Pilg.—[**syn: Avena striata Lam.**] Jenkin's Woods, 2 May 1899, 1191 (BUF); swampy woods, 20 Jun 1896, *s.n.* (ECH, BH, BUF, US); Jenkin's Woods at Greatsinger's Corner, low damp old rich woods, 27 May 1897, *s.n.* (ECH, BH, BUF, US).
- Hystrix patula* Moench.—[**syn: Hystrix hystrix (L.) Millsp.**] [Mt Zoar / Levy Hill Road], in dry elevated or rocky woods, 18 Aug 1894, *s.n.* (BUF, US).
- Koeleria macrantha* (Ledeb.) Schultes.—[**syn: Koeleria cristata Pers.**] Sullivan Hill, 9 Jul 1882, 890 (ECH).
- Leersia oryzoides* (L.) Sw.—Ashland, river gravel, 14 Aug 1880, *s.n.* (BUF); Ashland, 22 Aug 1880, *Cat. no.* 1880 (BUF, US); no location, 20 Aug 1881, *s.n.* (BUF); along Chemung River, Ashland, very wet places, 14 Aug 1880, 803 (ECH).
- Leersia virginica* Willd.—Chemung, 28 Aug 1888, 3360 (BUF); Lowman's Swamp, common, 28 Aug 1888, *s.n.* (BH, BUF, US); Elmira City, wet places, 31 Jul 1896, *Pat. no.* 12078 (MO); Ashland, river gravel, wet woods, 14 Aug 1880, 811 (ECH).
- Milium effusum* L.—in Jenkin's Woods, moist, 8 Jun 1896, *s.n.* (BUF); this side, Greatsingers Corner, swampy woods, 8 Jun 1894, *s.n.* (?); in Jenkin's Woods, moist, 8 Jun 1896, *Pat. no.* 12115 (MO); wet woods near Greatsinger's Corner, cold damp woods and mountain meadows, 8 Jun 1894, 1022 (ECH).

- Muhlenbergia frondosa* (Poir.) Fernald—[**syn: Muhlenbergia mexicana (L.) Trin.**] Elmira, garden, low moist ground, 9 Sep 1892, 1013 (ECH).
- Muhlenbergia mexicana* (L.) Trin.—Harrington's Island, Chemung River, low marsh ground, 4 Sep 1895, *s.n.* (BUF); East Elmira, canal, 10 Sep 1893, *s.n.* (BUF, US); Elmira, garden, 9 Sep 1892, *s.n.* (BUF, US); Harrington's Island, 4 Sep 1895, *s.n.* (BUF, US).
- Oryzopsis asperifolia* Michx.—Elmira, mud banks of Reservoir, 29 May 1898, *s.n.* (BUF, US); Elmira, Reservoir, mud banks, 29 May 1898, *Cat. no. 1133a* (BUF); Mt Zoar Hill, woods, in upland woods, 13 Jun 1897, 1133 (ECH).
- Panicularia acutiflora* (Torr.) Kuntze—near Seeley Creek, Erie Railroad Bridge, 24 Jun 1898, 1139 (ECH).
- Panicularia* sp.—over East Hill above road, woods, 27 Jun 1894, *s.n.* (BUF).
- Panicum capillare* L.—Ashland, Sullivan Hill, 24 Aug 1880, *s.n.* (BUF); cultivated grounds, 12 Aug 1892, *s.n.* (BUF, US); Cobble Hill, Chemung Valley, sandy soil and cultivated fields, 12 Aug 1892, 787 (ECH).
- Panicum dichotomum* L.—upland woods, 27 Jun 1894, *s.n.* (BUF); [near Water Cure Hill], upland woods, 7 Jul 1892, *s.n.* (BUF); upland woods, 27 Jun 1894, *s.n.* (BUF); Jenkin's Farm, swamp on farm, 25 Jul 1880, *s.n.* (BUF).
- Panicum lanuginosum* (Scribn.) Fernald—[**syn: Panicum dichotomum L.**] Mt Zoar Hill, woods and dry banks, 10 Jul 1892, 987 (ECH).
- Panicum latifolium* L.—[**syn: Dichanthelium latifolium (L.) Harvill**] near Seeley Creek, knoll, 24 Jun 1898, *s.n.* (BUF); Horseheads, near Latty Brook Road, 2 Sep 1896, *s.n.* (BUF); Hollow below where Jen taught, 29 Jun 1898, *Cat. no. 3000* (BH, BUF, US); trees along Baldwin Cr. near Elmira, moist woods, 7 Jul 1895, *Pat. no. 12220* (MO); Mt Zoar Hill near Elmira, humid woods, 10 Jul 1896, *Pat. no. 12220* (MO).
- Panicum linearifolium* Scribn.—[**syn: Panicum depauperatum Muhl.**] Sullivan Hill, Ashland, dry wood and hills, 7 Jul 1882, 887 (ECH).
- Panicum sanguinale* L.—Elmira, garden, 4 Aug 1892, 994 (ECH).
- * *Panicum scoparium* Lam.—[**syn: Panicum pubescens Lam.**] NY **Rarities -T-3**; in upland dry woods & along upland roads, 17 Jul 1896, *s.n.* (BUF); Sullivan Hill, 15 Aug 1880, 3587 (BUF); Cobble Hill, 12 Aug 1892, *s.n.* (BUF); no location, 10 Jul 1892, 987 (BUF, US); Elmira, Mt Zoar Hill, 10 Jul 1892, 3587 (BUF).
- Pennisetum glaucum* (L.) R. Br.—[**syn: Setaria glauca (L.) P. Beauv.**] Elmira, garden, 4 Aug 1892, 995 (ECH).
- Phalaris arundinacea* L.—Elmira, Old People's Home, marsh, 29 Jun 1898, *s.n.* (BUF); no location, 1884, *s.n.* (BH, BUF, US); near Old People's Home, 29 Jun 1898, *s.n.* (ECH, BH, BUF, US); wet grounds, marshes, Jun 1884, 970 (ECH).
- Phalaris canariensis* L.—5th Ward, 6 Jul 1884, *s.n.* (BH, BUF, US); Elmira, garden, 5 Jul 1889, *s.n.* (BUF, US); in waste places, 5 Jun 1897, *s.n.* (BUF); in waste places, 5 Jul 1897, *Pat. no. 12309* (MO); 5th Ward, waste places and roadside, 6 Jul 1884, 977 (ECH).
- Phleum pratense* L.—Sullivan Hill, 1 Aug 1896, *s.n.* (BUF); Elmira, meadows, etc., 30 Jun 1892, 552 (ECH).
- Poa alsodes* A. Gray—on East Hill, woods above road, 27 Jun 1894, *s.n.* (BUF).
- Poa annua* L.—Elmira, garden, cultivated grounds, 29 May 1898, 909 (BUF, US); Elmira, wet and waste ground, 7 Jun 1884, 909 (ECH).
- Poa compressa* L.—Elmira, crest of Mt Zoar, 20 Jul 1897, *s.n.* (BUF); N of Eldridge Lake, Elmira, dry mostly sterile soil, 24 Jun 1889, 884 (ECH).
- Poa nemoralis* L.—[**syn: Agrostis alba L., Agrostis alba L. var. vulgaris Thurb.**] Elmira, Mt Zoar Hill, 10 Jul 1892, *s.n.* (BUF); above Horseheads, 27 Jun 1896, "11833" (?); Botany Swamp, 20 Jul 1892, *s.n.* (BUF); Water Cure Hill, meadows and fields, 7 Jul 1892, 796 (ECH); Alfred Searles' Farm, Chemung River banks, 14 Jul 1897, *s.n.* (BUF); Water Cure Hill, meadows and field, 7 Jul 1892, 988 (ECH).
- Poa pratensis* L.—Elmira, garden, 30 Jun 1892, 3484 (BUF); banks of the Chemung River, 24 Jun 1882, *s.n.* (BUF); Elmira, garden, 30 Jun 1892, *s.n.* (BUF, US); Sullivan Hill, 16 Jun 1884, *s.n.* (BUF); Ashland, Fruit Homestead, canal, 25 Jun 1882, *s.n.* (BUF, US); Elmira, 8 Jun 1887, 3484 (BUF, US); Ashland, Fruit Homestead, 6 Jun 1880, 3484 (BH, BUF, US); Sullivan Hill, Elmira, moist meadows, etc., swamp, 22 Jul 1882, 874 (ECH).
- Poa* sp.—[near Water Cure Hill], edges of upland woods & roads, 7 Jul 1892, *s.n.* (BUF).
- Poa trivialis* L.—Elmira, Mt Zoar, woods, near Levy Road, 10 Jun 1895, *s.n.* (BUF).
- Schedonorus arundinaceus* (Schreb.) Dumort.—[**syn: Festuca elatior L.**] Elmira, 25 Jun 1884, *s.n.* (BUF).
- Schizachne purpurascens* (Torr.) Swallen—[**syn: Avena striata Michx.**] Jenkin's Woods, Greatsinger's Corner, in damp rich woods, 27 May 1897, 1055 (ECH).
- Schizachyrium scoparium* (Michx.) Nash—[**syn: Andropogon scoparius Michx.**] Mountain House Narrows, 9 Aug 1898, *s.n.* (BUF, US); Cobble Hill, 21 Aug 1898, *s.n.* (BUF); East Elmira, above stone quarry, near Mrs. Cranes, woods, 30 Aug 1896, *s.n.* (ECH, BH, BUF, US); hillside above Stone Quarry, dry rocky hillside woods, 30 Aug 1896, 1068 (ECH).
- Secale cereale* L.—Elmira, Mt Zoar, escaped Rutan's Farm, 25 May 1894, *s.n.* (BUF); Rutan Farm, Mt Zoar, roadside, cultivated fields, 25 May 1894, 1018 (ECH).
- Setaria italica* (L.) P. Beauv.—old road above Knitting Mill, cultivated, 16 Aug 1899, 1319 (BUF, US); Elmira, garden, 17 Aug 1899, 1335 (ECH, BH, BUF, US, MO); above Knitting Mill, Elmira, cultivated, sometimes escaped, 16 Aug 1899, 1319 (ECH).
- Setaria pumila* (Poir.) Roem. & Schult.—[**syn: Setaria pumila (Poir.) Roem. & Schult. subsp. Pumila**] [Elmira], cultivated grounds & roadside, 4 Aug 1892, *s.n.* (BUF).
- Sorghastrum nutans* (L.) Nash—[**syn: Chrysopogon avenaeus Benth.**] bank of Chemung R., Harrington Island, in dry fields, river banks, 4 Sep 1895, 1042 (ECH).
- Sphenopholis nitida* (Biehler) Scribn.—[**syn: Eatonia dudleyi Vasey**] Sullivan Hill, 1884, *s.n.* (ECH).
- Tridens flavus* (L.) Hitchc.—[**syn: Poa flava L., Poa serotina Ehrh.**] Jenkin's Woods, swampy woods, 27 May 1897, *s.n.* (BUF); Jenkin's Woods at Greatsinger's Corner near Baldwins Creek, low rich, damp places, 27 May 1897, *s.n.* (BUF); in swampy places, 7 Jul 1882, *s.n.* (BUF); in swampy places, 10 Jun 1897, *s.n.* (BUF); [Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (BUF, US); Jenkin's Woods at Greatsinger's Corner, 14 May 1896, *s.n.* (BUF); Elmira, along inlet water to Upper Reservoir, 29 May 1898, *s.n.* (BUF); in swampy places, 30 Jun 1897, *s.n.* (BUF); in swampy places, 10 Jul 1897, *Pat. no. 12374* (MO); Botany Swamp, Elmira, wet meadows and low bank of streams, 20 Jul 1892, 922 (ECH). Indet.—Pine City, up Dry Run, 11 Jun 1898, *s.n.* (BH, BUF, US); near Knoll, 24 Jun 1898, *s.n.* (BUF); Pine City, up Dry Run, 11 Jun 1898, *s.n.* (ECH, BH, BUF, US); Chemung River, river banks, 24 Jun 1882, *s.n.* (BUF).

Polemoniaceae

- Phlox divaricata* L.—Lowman's Swamp[?], 23 May 1882, *s.n.* (BUF); near cottages opposite Huffy Marsh, banks of the Chemung River, 21 May 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); Chemung River opposite Bohemia, in moist woods and thickets, 21 May 1897, 474a (ECH).
- Phlox paniculata* L.—just above Pine Valley, in woods and thickets, 31 Aug 1898, 1160½ (ECH).

Phlox subulata L.—Elmira, 27 Apr 1879, *Cat. no. 2150* (BUF); road to Mountain House, dry rocky banks, 6 May 1896, *s.n.* (BH, BUF, US); East Elmira; near Arnot's Woods, 13 May 1884, *s.n.* (BUF, US); Coleman's Glen, dry sunny banks, 8 May 1887, 5736 (BH, BUF, US); Chemung, Chemung Narrows, 23 Apr 1880, *Cat. no. 2150* (BUF); Coleman's Glen, dry rocky hills and sandy banks, 8 May 1887, 16 (ECH).

Polemonium reptans L.—Chemung River, 21 May 1882, 155 (BUF); Harrington's Island, Chemung River, 3 Jun 1883, 2138 (BH, BUF, US); along the Chemung River, 29 May 1887, *s.n.* (BUF); Ashland, banks of the Chemung River, 14 May 1879, *Cat. no. 2138* (BUF, US); Chemung River near Pickaway, 21 May 1897, *s.n.* (BUF, US); Chemung River, in shade, 29 May 1887, *s.n.* (BUF); banks of the Chemung River, in shade, 21 May 1882, 5639 (BUF, US); along the Chemung River, in alluvial woods, 21 May 1881, 482 (ECH).

Polygalaceae

Polygala paucifolia Willd.—Elmira, over Water Cure Hill, roadside banks, 26 May 1900, 1408 (ECH, BH, BUF, US); no location, 17 May 1879, 520 (ABSL); no location, 1 May 1886, *s.n.* (ABSL); Mt Zoar Hill, woods in light soil, 28 May 1893, 12 (ECH).

Polygala pretzii Pennell—[**syn: Polygala verticillata L. var. ambigua Wats. & Coult.**] Sullivan Hill, dry hills and dry soil, 8 Jul 1896, 1120 (ECH).

Polygala senega L.—[**syn: Polygala senega L. var. latifolia**] Ashland, Sullivan Hill, 12 May 1878, 524 (BUF); over East Hill, left hand road & slopes of ravines, 31 May 1897, *s.n.* (BUF, US); Elmira, Upper Reservoir, woods back of reservoir, 29 May 1898, *s.n.* (BUF); East Hill near Clemen Play[?], woods, 29 May 1896, *s.n.* (BUF); Elmira, along Mt Zoar Hill Road, upper hillside, 7 Jun 1893, 681 (BUF); Ashland, Fruit Homestead, 18 Jun 1879, *Cat. no. 524* (?); slopes of ravines., 22 Jun 1897, *Pat. no. 871* (MO); upland woods, in rocky woods, 29 Jun 1898, 646a (ECH).

Polygala verticillata L. var. *ambigua* Wats. & Coult.—Sullivan Hill, 10 Sep 1882, *s.n.* (BUF); Sullivan Hill, dry soil, hills, 10 Sep 1882, 725 (ECH).

Polygonaceae

Fagopyrium sagittatum Gilib.—[**syn: Fagopyrium esculentum Moench.**] Ashland, in old fields, roadside, 15 Jul 1882, 72 (ECH).

Fallopia scandens (L.) Holub—[**syn: Polygonum dumetorum L. var. scandens A. Gray.**] Big Island, 1 Sep 1888, 786 (ECH).

Persicaria amphibia (L.) Delarbre—[**syn: Polygonum emersum (Michx.) Britton**] near Harrington's Ford, Ashland, in muddy and wet river shore, 31 Aug 1883, 869 (ECH); Eldridge Park, north end, in triangle of railroad & road, 24 Jun 1889, *s.n.* (BUF, US); Lowman's Swamp, 22 Sep 1897, *s.n.* (?); Lowman's Marsh, 21 Sep 1897, *s.n.* (BUF, US); Lowman's Swamp, marshes, 1 Aug 1880, 780 (ECH).

Persicaria arifolium (L.) Haraldson—[**syn: Polygonum arifolium L.**] Lowman's Marsh, rare, 21 Sep 1897, *Pat. no. 9242* (WIS).

Polygonum amphibium L. var. *hartwrightii* A. Gray—pool eastern edge of Eldridge Park, Elmira, aquatic, 24 Jun 1889, 975 (ECH).

Polygonum aviculare L.—Sullivan Hill, 27 Jul 1898, *s.n.* (BUF, US); Sullivan Hill, cultivated and waste grounds, 27 Jul 1898, 252a (ECH).

Polygonum convolvulus L.—Seeley Creek, cultivated and waste ground, 18 Aug 1887, 621 (ECH); Seeley Creek, shores, 25 Jul 1896, *Pat. no. 9256* (WIS).

§ *Polygonum erectum* L.—**State: U; TNC Rank: G5 SX**; Ashland, 18 Sep 1887, *s.n.* (BUF, US); Elmira, 16 Sep 1899, 1357 (BH, BUF, US); Ashland, in moist or dry soil, 18 Sep 1887, 599 (ECH).

Polygonum hydropiper L.—moist waste places, 4 Sep 1897, *s.n.* (BUF); East Elmira, 10 Sep 1893, *s.n.* (BUF); [on Ridge Road above Horseheads], woods, 16 Aug 1898, *s.n.* (ECH, BH, BUF, NY, MO,

US); Harrington's Island, 4 Sep 1895, *s.n.* (BUF); Horseheads, moist or wet grounds, 2 Sep 1885, 296 (ECH); moist waste places, 10 Sep 1897, *Pat. No. 9269* (WIS).

Polygonum laphthifolium L.—[**syn: Polygonum laphthifolium L. var. incarnatum Watson**] along Newtown Creek above Fairgrounds, wet places, 2 Sep 1896, 788 (ECH).

Polygonum orientale L.—Elmira, on street to Breesport, 24 Aug 1898, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US); river bank near Upper Bridge, Elmira, in waste places, 16 Aug 1896, 1044 (ECH).

Polygonum pennsylvanicum L. var. *laevigatum* Fernald—Elmira, in moist rich soil, 31 Aug 1883, 294 (ECH); Elmira, 16 Aug 1899, 1325 (BUF).

Polygonum sagittatum L.—Lowman's Swamp, 1 Sep 1889, *s.n.* (?); Elmira, Rorick's Glen, 31 Aug 1890, *s.n.* (BUF); East Elmira, 10 Sep 1879, *s.n.* (BUF); Ashland, Fruit Homestead, 28 Sep 1879, 2140 (BUF, US).

Polygonum sagittatum L. var. *americanum* Meisn.—Elmira, low ground, 15 Sep 1887, 737 (ECH).

Polygonum sp.—Elmira, garden, 17 Aug 1899, 1338 (BUF); Elmira, garden, 22 Aug 1892, *s.n.* (?); Elmira, Rorick's Glen, 31 Aug 1890, *s.n.* (BUF).

Polygonum virginianum L.—Elmira, garden, 29 Aug 1897, 1064 (BUF); Rorick's Glen, thickets, alluvial soil, 31 Aug 1890, 534 (ECH).

Rumex acetosella L.—Sullivan Hill, 3 Jun 1894, *s.n.* (ECH, BH, BUF, US); Ashland, Fruit Homestead, 1 Jun 1882, *Cat. no. 2432* (BUF); Ashland, Fruit Homestead, 17 Jul 1879, *Cat. no. 2432* (BH, BUF, US).

Rumex angiocarpus Borb.—[**syn: Rumex acetosella L.**] Ashland, Searles Farm, fields, waste ground, 1 Jun 1882, 238 (ECH).

Rumex crispus L.—roadside, 20 Jun 1896, *s.n.* (BUF); Elmira, cultivated grounds, in field and waste places, 20 Jun 1882, 845 (ECH), along roads, etc., 23 Jun 1896, *Pat. No. 9305* (WIS).

Rumex obtusifolius L.—Elmira, garden, 9 Jul 1890, *s.n.* (BUF); Elmira, cultivated ground, in waste places, 28 Jun 1897, 184a (ECH); along roads, etc., 2 & 9 Jul 1896, *Pat. No. 9310* (WIS).

Rumex obtusifolius L. subsp. *agrestis* Fr.—Elmira, garden, fields, roadsides, woods, 9 Jul 1890, 184 (ECH).

Rumex salicifolius Weinm. subsp. *triangularis* Danser—[**syn: Rumex britannica L.**] along fence end of E Water St., Elmira, in swamp and wet soil, 6 Jul 1894, 1019 (ECH).

Rumex sp.—Wellsburg swamps, 22 Jun 1898, *s.n.* (BUF, US); Seeley Creek, 26 May 1896, *s.n.* (BUF); Elmira, garden, 28 Jun 1897, *s.n.* (BH, BUF, US).

Rumex verticillatus L.—Wellsburg, wet swamps, marshes, 22 Jun 1898, 1003 (ECH).

Pontederiaceae

Heteranthera graminea Vahl—Chemung River, 18 Jul 1888, *s.n.* (BUF, US); Decker's Cove, 3 Aug 1893, *s.n.* (ECH, BH, BUF, US); in the Chemung River, streams, inlets, etc., 3 Aug 1893, 608 (ECH).

Portulacaceae

Claytonia caroliniana Michx.—beechwood right hand fork of Latty Brook Rd, in damp woods, 13 May 1898, 436 (ECH).

Claytonia virginica L.—along the Chemung River, Ashland, moist open rich woods, 21 May 1882, 316 (ECH).

Portulaca oleracea L.—5th Ward, cultivated ground, Aug 1888, 408 (ECH).

Potamogetonaceae

Potamogeton amplifolius Tuckerm.—Chemung River at Fitches Bridge, in lakes, 18 Jul 1884, 911½ (ECH).

Potamogeton crispus L.—pool at Eldridge Lake, Elmira, 22 Jun 1897, *Pat. no. 10814* (CONN, NEB, US); pool near Eldridge Lake, Elmira, fresh, brackish or even salt water, 22 Jun 1897, 1094 (ECH).

Potamogeton epihydrus Raf.—[**syn: Potamogeton pennsylvanicus Willd. ex Cham. & Schldl.**] Tubb's Farm, 21 Jul 1888, *s.n.* (BUF, US)

Potamogeton illinoensis Morong—[**syn: Potamogeton praelongus Wulf.**] Chemung River, 1 Jun 1884, *Pat no. 10843* (MU); Chemung River just below Wellsburg, 17 Jul 1895, *1036* (ECH).

Potamogeton natans L.—in Newtown Creek, Elmira, in ponds and streams, 8 Aug 1892, *769* (ECH).

Potamogeton nodosus Poir.—[**syn: Potamogeton lonchites Tuckerm.**] Fitches Bridge, 3 Jul 1880, *910½* (ECH).

Potamogeton perfoliatus L.—[**syn: Potamogeton perfoliatus L. var. lanceolatus Robbins**] Chemung River, ponds & slow streams, Jun 1884, *s.n.* (BUF); near Harrington's Ford, Chemung River, 15 Jul 1888, *s.n.* (BUF); in the Chemung River near Harrington Island, in ponds and streams, 15 Jul 1888, *911* (ECH); in the Chemung River, frequent, Jun 1895, *Pat. No. 10842?* (WIS).

Potamogeton perfoliatus L. var. *richardsonii* (Benn.) Piper—Chemung River near Fitches Bridge, in stream, 18 Jun 1884, *966* (ECH).

Potamogeton praelongus Wulfen—right below Fitch's Bridge, 16 Jul 1888, *s.n.* (BUF, US); Wellsburg, river, 17 Jul 1895, *s.n.* (BUF, US).

Potamogeton sp.—Decker's Cove, water, 3 Aug 1893, *s.n.* (BUF).

Stuckenia pectinata (L.) Börner—[**syn: Potamogeton pectinatus L.**] near Fitch's Bridge, 18 Jul 1884, *s.n.* (BUF); Chemung River, 18 Jul 1894, *925* (BUF); Chemung River, 18 Jul 1894, *925* (SEI-Net); in the Chemung River, in fresh or brackish water, 16 Jul 1888, *925* (ECH).

Primulaceae

Lysimachia ciliata L.—[**syn: Steironema ciliatum (L.) Baudou**] Ashland, 10 Aug 1883, *162b* (BUF); Sullivan Hill, low ground and near streams, 1 Aug 1896, *162a* (ECH); Rorick's Glen, in moist low thickets, 17 Sep 1897, *162b* (ECH).

Lysimachia nummularia L.—5th Ward, garden, escapes in damp ground, 20 Jun 1893, *799* (ECH).

§ *Lysimachia quadrifolia* L.—**State: E; TNC Rank G5? S1**, open thickets and woods, 22 Jun 1898, *Heller no.9571* (F); Sullivan Hill, thickets, slopes of ravines, 9 Jul 1882, *57* (ECH).

Lysimachia terrestris (L.) Britton, Sterns & Poggenb.—[**syn: Lysimachia stricta Ait.**] Southport, Miller's Pond, 10 Jul 1883, *Cat. no. 159b* (BUF); swamps near Wellsburg, swamps and low moist thickets, 2 Jul 1896, *159a* (ECH); Miller's Pond, Southport, low wet ground, 10 Jul 1883, *159* (ECH).

Trientalis borealis Raf.—[**syn: Trientalis americana Pursh**] no location, Jun 1897, *s.n.* (BKL); Lowman's Swamp, damp cold woods, 23 May 1880, *450* (ECH).

Pyrolaceae

Pyrola chlorantha Sw.—Sullivan Hill, open woods with evergreens, 15 Jun 1886, *700* (ECH).

Ranunculaceae

Actaea pachypoda Elliot—[**syn: Actaea alba Mill.**] Lowman's Swamp, 4 Jun 1897, *Heller no. 4464* (F).

Actaea rubra (Aiton) Willd.—[**syn: Actaea alba Mill.**] Sullivan Hill, 27 Jul 1898, *s.n.* (BUF, US); Pine City, Dry Run, 11 Jun 1898, *s.n.* (ECH, BH, BUF, US); Lowman's Swamp, 4 Jun 1897, *s.n.* (BUF); up Dry Run, beechwoods, 8 Sep 1897, *s.n.* (BH, BUF, US).

Actaea spicata L. var. *rubra* Michx.—Baldwin, 26 May 1879, *Cat. no. 68* (BUF, US); Ashland, near Seeley Creek Bridge, 26 May 1884, *Cat. no. 68* (BUF).

Anemone nemorosa L.—Big Island, 15 May 1887, *s.n.* (BH, BUF, US).

Anemone virginiana L.—Miller's Pond, 10 Jul 1883, *s.n.* (BUF); Ashland, Fruit Homestead, Chemung River, banks opposite property, borders of woods & river, 14 Jul 1897, *s.n.* (BUF, US).

Anemonella thalictroides L.—on East Hill, 16 May 1894, *s.n.* (?);

Pickaway, 21 May 1897, *s.n.* (BUF, US); Elmira, road top of Water Cure Hill, 21 May 1900, *1402* (BH, BUF, US); between Horseheads & Elmira, woods, 11 Jun 1897, *s.n.* (BH, BUF, US); Elmira, Mt Zoar Hill woods, 28 May 1893, *s.n.* (BUF).

Aquilegia canadensis L.—Elmira, garden, 11 Jun 1894, *s.n.* (ECH, BH, BUF, US); Pine City, head of Christian Hollow, 2 Jun 1897, *s.n.* (BH, BUF, US); no location, no date, *s.n.* (BUF, US); Pine City, head of Christian Hollow, 2 Jun 1897, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US).

Caltha palustris L.—Lowman's Swamp, 8 May 1897, *s.n.* (BUF, US); Chemung, Lowman's Swamp, 4 May 1880, *Cat. no. 55* (BUF, US).

Cimicifuga racemosa (L.) Nutt.—near Elmira, river banks at Pickaway, 5 mi N of city, ravines, 30 Jul 1897, *s.n.* (BUF); Ashland, 12 Aug 1879, *s.n.* (BUF, US); Elmira, Rorick's Glen, 14 Jul 1893, *s.n.* (BUF).

Clematis occidentalis (Hornem.) DC.—[**syn: Clematis verticillaris DC.**] Southport, 7 Jun 1897, *s.n.* (BUF); Seeley Creek Bridge, 7 Jun 1887, *19* (BUF); Ashland, near Seeley Creek Bridge, foot of hill, 25 May 1884, *1* (BUF).

Clematis sp.—Southport, 9 May 1886, *s.n.* (BUF).

Thalictrum dioicum L.—over East Hill, woods, 26 May 1895, *s.n.* (BH, BUF, US); Orchid Glen, 14 May 1899, *1206* (ECH, BH, BUF, NY, MO, US); near Brewery, on banks, 12 Jun 1893, *s.n.* (BH, BUF, US); East Elmira; Arnot's Woods, 13 May 1884, *s.n.* (BUF, US); East Elmira; Arnot's Woods, 13 May 1884, *28* (BUF); near Seeley Creek Bridge, 26 May 1884, *s.n.* (BUF); Sullivan Hill, 7 Jul 1895, *s.n.* (BUF); Ashland, Fruit Homestead, 11 May 1879, *24* (BUF, US).

Thalictrum pubescens Pursh—[**syn: Thalictrum polygamum Muhl. ex Spreng.**] Ashland, 20 Jul 1887, *25* (BUF, US); Ashland, opposite Fruit Homestead, bank of the Chemung River, 14 Jul 1897, *s.n.* (ECH, BH, BUF, NY, MO, US); near Riverside Park, 19 Jul 1898, *s.n.* (ECH, BH, BUF, MICH, MO, NY, NYS, US).

Indet.—Pine Valley, pond, 4 Jun 1899, *1231* (BUF, US).

Rhamnaceae

Ceanothus americanus L.—Sullivan Hill, 9 Jul 1882, *469* (BUF); over East Hill, woods above road, 27 Jun 1894, *s.n.* (BH, BUF, US); Ashland, Sullivan Hill, 3 Jul 1879, *Cat. no. 469* (BUF); Chemung Narrows, 12 Jul 1895, *s.n.* (BUF); Elmira, Mt Zoar Hill woods, in dry woodlands, 6 Jul 1893, *389* (BUF, US, ECH); Chemung Narrows, in dry woodlands, 6 Jul 1895, *Coll. no. 396a* (ECH); Mt Zoar Hill, in dry woodlands, 6 Jul 1896, *389* (ECH).

Rhamnus alnifolia L'Her.—on Baldwin Creek, cold marsh & swamp, 19 May 1897, *s.n.* (BUF, US); swamp along Baldwin Creek, swamp, 10 May 1895, *1026* (ECH).

Rosaceae

Agrimonia gryposepala Wallr.—[**syn: Agrimonia hirsuta (Muhl.) Bicknell**] Mt Zoar Hill, borders of woods, 26 Jul 1895, *118* (ECH); Ashland, borders of woods, 18 Aug 1882, *s.n.* (ECH).

Amelanchier arborea (Michx.) Fern.—[**syn: Amelanchier canadensis (L.) Medic. var. oblongifolia**] Hendy Creek, low moist grounds, 3 May 1894, *938* (ECH); hill woods [Mt Zoar], ravines and woods, 12 Jun 1887, *5* [p.p.] (ECH).

Amelanchier canadensis (L.) Medic.—Right fork of Latty Brook Road, beech wood, 13 May 1898, *s.n.* (BUF).

Amelanchier laevis Wieg.—[**syn: Amelanchier canadensis T. & G.**] near Wellsburg, roadside, in dry woodland, 29 Apr 1894, *5* (ECH); Hill woods [Mt Zoar], ravines and woods, 12 Jun 1887, *5* [p.p.] (ECH).

Amelanchier oblongifolia (Torr. & A. Gray) M Roem.—[**syn: Amelanchier botryapium (L.f.) DC., Amelanchier canadensis (L.) Medic. var. oblongifolia, Amelanchier oblongifolia (Torr. & A. Gray) M. Roem. var. arborea**] Jenkin's Woods, 2 May 1899, *1177* (BUF); Hendy Creek Pond, roadside, 13 May 1900, *1393* (BUF, US); Elmira, Mt Zoar Hill, woods, 3 May 1894,

- s.n.* (BUF, US); Jenkin's Woods, 2 May 1899, 1178 (BUF, US); Elmira, crest of Mt Zoar, 25 May 1894, 2000 (BUF).
- Amelanchier sanguinea* (Purch.) DC.—[**syn: Amelanchier rotundifolia (Michx.) Roem.**] crest of Mt Zoar Hill, woods and thickets, 9 May 1895, *s.n.* (ECH).
- Amelanchier stolonifera* Wieg.—[**syn: Amelanchier spicata (Lam.) Dec.**] roadside beyond Payne's Shops, very gravelly soil and rocky places, 10 May 1894, 1016 (ECH).
- Aronia arbutifolia* (L.) Pers.—[**syn: Photinia pyrifolia**] Elmira, Mt Zoar Hill Road, 23 May 1893, *s.n.* (BUF, US).
- Aronia nigra* (Willd.) Britton—[**syn: Aronia nigra (Willd.) Britton**] wet woods back of upper Water Reservoir, swamps or low woods, 29 May 1898, 321½ (ECH).
- Crataegus calpodendron* (Ehrh.) Medic.—[**syn: Crataegus coccinea L. var. macracantha Dudley**] Baldwin Creek road, hillside and stony soil, 7 Jun 1887, 947 (ECH).
- Crataegus calpodendron* x *macracantha* —[**syn: Crataegus tomentosa L.**] East Elmira / Ashland, hedges and moist soil, 10 Jun 1882, 265 (ECH).
- Crataegus coccinea* L.—[**syn: Crataegus coccinea L. var. oligandra T. & G.**] Stone Quarry hill; [] hill, 30 Aug 1896, *s.n.* (?); over Fitch's Bridge, foot of hill, 21 Sep 18[], 5015 (BUF); Pine City, Christian Hollow Road, left side, 27 May 1894, *s.n.* (BUF); hill near Seeley Creek railroad bridge, 16 May 1895, *s.n.* (BUF).
- Crataegus crus-galli* L.—between Horseheads & Elmira, 19 May 1878, 236 (ECH); near fairgrounds, old woods, 19 Jun 1901, 5006 (?).
- Crataegus foetida* Ashe—Baldwin Creek, thickets and hillsides, 27 May 1894, 267 [p.p.] (ECH).
- Crataegus filipes* Ashe—Baldwin Creek, thickets and hillsides, 27 May 1894, 267 [p.p.] (ECH).
- Crataegus macauleyae* Sarg.—Baldwin Creek, thickets and hillsides, 27 May 1894, 267 [p.p.] (ECH).
- Crataegus macracantha* x *tomentosa*—N of Elmira, McConnell's Woods, 15 Jun 1901, 5000 (BUF).
- Crataegus macracantha* Lodd. ex Louden—[**syn: Crataegus coccinea L. var. macracantha Dudley, Crataegus macracantha Lodd. ex Louden**] Horseheads, near Latty Brook, woods, 2 Sep 1896, *s.n.* (BUF); Ashland, Cobble Hill, 3 Sep 1899, 1352 (BUF); Baldwin Creek, woods, thickets, 7 Jun 1887, *s.n.* (BUF); no location, 19 Jun 1901, 5001 (BUF); near Latty Brook Road, hillside and along fences, stony soil, 2 Sep 1896, 947 (ECH).
- Crataegus mollis* (Torr. & A. Gray) Scheele—low woods, thickets, 22 Jun 1897, 1095 (?); Cobble hill, east end, thicket & woods, 21 Aug 1898, *Coll. no. 1095* (ECH).
- Crataegus punctata* Jacq.—Chemung, May 1896, *s.n.* (BKL); Christian Hollow Rd, hillside, fields & thickets, 27 May 1894, 235 (ECH).
- Crataegus* sp.—Elmira, McConnell's Woods, 5 Sep 1901, *Cat. no. 5003* (BUF); Elmira, Grand Central Ave, 5 Sep 189[], *Cat. no. 5000*, (BUF); Elmira, McConnell's Woods, west side, same woods, 19 Jun 1901, 5010 (BUF); Elmira, near Upper Reservoir, 29 May 1898, *s.n.* (BUF); between Horseheads & Elmira, woods above fairgrounds, 11 Jun 1897, 2050 (BUF); Horseheads, near Grand Central Ave, woods, 15 Jun 1901, 5001 (BUF); Elmira, Grand Central Ave, woods, 5 Sep 1901, 5002 (BUF, US); [N of Elmira/Horseheads], 15 Jun 1901, 5002 (BUF); Elmira Heights, McConnell's Woods, 5 Sep 1901, 5007 (BUF); Elmira, McConnell's Woods, 19 Jun 1901, 5008 (BUF, US); "same woods," 19 Jun 1901, 5008 (BUF).
- Crataegus tomentosa* L.—East Elmira, 25 May 1887, 2369 (BUF); river work W. Lowman, 23 May 1899, 1218 (?).
- Fragaria vesca* L.—Greatsinger's Corner, 27 May 1882, *s.n.* (BUF); Greatsingers Corner, 27 May 1882, 779 (BUF); Hog Hollow, 3 Jun 1894, *s.n.* (BUF); Seeley Creek Bridge, 7 Jun 1887, *Cat. no. 586* (BUF); Baldwin, 14 May 1880, *s.n.* (BUF); Seeley Creek Bridge, 7 Jun 1887, *s.n.* (BUF).
- Fragaria vesca* L. subsp. *americana* (Porter) Staudt.—[**syn: Fragaria vesca L. var. americana Porter**] Seeley Creek Bridge (near), fields and rocky places, 7 Jun 1887, *s.n.* [p.p.] (ECH).
- Fragaria virginiana* Dcne.—Pine Valley Pond, 4 Jun 1899, 1236 (BUF); along creek in woods on hill, 2 Jun 1896, *s.n.* (BH, BUF, US); Orchid Glen, 14 May 1899, 1214 (BUF); Elmira, Mt Zoar Hill, woods, 28 May 1893, *s.n.* (BUF, US); crest of Mt Zoar, moist or rich woodlands, May 1894, 221 (ECH); Seeley Creek Bridge (near), fields and rocky places, 7 Jun 1887, *s.n.* [p.p.] (ECH).
- Fragaria virginiana* Dcne. subsp. *grayana* (Vilm. ex J. Gay) Staudt—[**syn: Fragaria virginiana Dcne. var. illinoensis A. Gray**] Water Cure Hill, roadside, 21 May 1900, 1406 (BH, BUF, US); Elmira, beyond Payne's shops, 10 May 1894, *s.n.* (BUF); Mt Zoar Hill, woods, in rich soil, 27 May 1897, *s.n.* (ECH); near SW c. s. [illeg.] 12 mi, bog, 10 May 1896, *s.n.* (BUF, US).
- Geum aleppicum* Jacq.—[**syn: Geum strictum Aiton**] Elmira, in Old Canal Bed, 19 Jun 1879, 758 (BUF); ravine below woods near South house, woods, 24 Jun 1898, *s.n.* (BUF, US); Horseheads, Newtown Creek, 20 Jul 1885, *s.n.* (BUF); Lowe's Pond, Big Flats, moist meadows, etc., 8 Jul 1888, 696 (ECH).
- Geum hispidum* Fr. subsp. *albarracinense* (J.F. Gmel.) Mateo—[**syn: Geum album J.F. Gmel.**] Elmira, 28 Jun 1887, *s.n.* (BUF); Elmira, woods above fairgrounds, 6 Jul 1884, 755 (ECH, BH, BUF, US); Chemung, Lowman's Swamp, 3 Jul 1881, 755 (BUF); Elmira, borders of woods, hedges, 28 Jun 1887, 914 (ECH).
- Geum rivale* L.—Pine City, head of Christian Hollow Rd, same side as [illeg.], 2 Jun 1897, *s.n.* (BUF, US); Greatsinger's Swamp, 30 May 1884, 760 (BUF, US); Baldwin Creek Marsh, 19 May 1897, *s.n.* (BUF); Greatsingers Swamp on Baldwins Cr., bogs, marshes, 30 May 1884, 541 (ECH).
- Geum* sp.—Elmira, garden, 9 Jul 1890, *s.n.* (BUF); Big Flats, Lowe's pond, 8 Jul 1888, *s.n.* (BUF, US).
- § Geum virginianum* L.—**State: E; TNC Rank G5 S1**; Elmira, Mt Zoar Hill, woods, 13 Jun 1897, *s.n.* (BUF); Miller's Pond, 5 Aug 1897, *s.n.* (ECH, BH, BUF, NY, US); Van Etten Swamp, 13 Jun 1899, 1284 (BUF); [Miller's Pond], marsh and swamps, 5 Aug 1897, *Heller no. 5758* (F); marsh just W. of Wellsburg, low ground, marshes, 2 Jul 1896, 590 (ECH).
- Malus coronaria* (L.) Mill.—[**syn: Pyrus coronaria L.**] near Seeley Creek Bridge, 16 May 1895, 2350 (?); Lowman's Swamp, glades, etc., 23 May 1882, 2350 (BUF); Lowman's Swamp, glades, hill slopes, 23 May 1882, 21 [p.p.] (ECH).
- Malus sylvestris* (L.) Mill.—[**syn: Pyrus malus L.**] [Lowman's Swamp], roadside near Hulberts, 30 Apr 1896, *s.n.* (BUF); Seeley Creek, roadside, waste places, 10 May 1894, 4 (ECH); Lowman's Swamp, glades, hill slopes, 23 May 1882, 21 [p.p.] (ECH).
- Opulaster opulifolius* (L.) Maxim.—along the Chemung River, rocky banks of streams, 24 Jun 1882, 588 (ECH); near Harrington's Ford, river banks, rocky places, 18 Jun 1898, 588 (ECH).
- Photinia pyrifolia* (Lam.) K.R. Robertson & Phipps—[**syn: Pyrus arbutifolia (L.) L.f.**] Van Etten Swamp, 13 Jun 1899, 1275 (BH, BUF, US); Southport, swamps and damp thickets, 12 Jun 1887, 321 (ECH).
- Physocarpus opulifolius* (L.) Maxim. var. *opulifolius*—[**syn: Spiraea opulifolia L., Spiraea opulifolia L. var. opulifolius**] Ashland, Fruit Homestead, 24 Jun 1882, *Cat. no. 739* (ECH, BH, BUF, NY, US); Ashland, Fruit Homestead, 12 Jun 1879, *Cat. no. 739* (BUF).
- Porteranthus trifoliatius* (L.) Britton—[**syn: Gillenia trifoliata (L.) Moench.**] in upland woods, rich woods, Jul 1895, 58 (ECH); Mt Zoar Hill, rich woods, 17 Jun 1894, 58 (ECH).
- Potentilla argenta* L.—Southport, 12 Jun 1887, *s.n.* (BUF); Elmira, 18 Jun 1881, *s.n.* (BUF); Elmira, 18 Jun 1881, *Cat. no. 771* (BUF, US);

- Ashland, Fruit Homestead, 22 Jun 1881, *s.n.* (BUF); road between Horseheads & Elmira, 11 Jun 1897, *s.n.* (BUF, US); Southport, dry barren fields, roadside, etc., 12 Jun 1887, 618 (ECH).
- Potentilla argute* Pursh—Mountain House Narrows, 2 Sep 1897, *s.n.* (BUF); near Mountain House, 9 Aug 1898, *s.n.* (?); near Mountain House, 13 Aug 1887, *s.n.* (BUF); Big Flats, just above Mountain House Narrows, 5 Aug 1897, *s.n.* (BUF); near Old Mountain House, rocky or dry banks, 13 Aug 1887, 959 (ECH).
- Potentilla canadensis* L.—Sullivan Hill, 3 Jun 1896, *s.n.* (?); between Horseheads & Elmira, above fairgrounds, woods, 11 Jun 1897, *s.n.* (BUF, US).
- Potentilla norvegica* L.—Ashland, Fruit Homestead, 24 Jun 1879, *Cat. no.767* (ECH, BH, BUF, US); Elmira, gardens, fields, 9 Jul 1890, 128 [p.p.] (ECH).
- Potentilla norvegica* L. var. *hirsuta* (Michx.) Hyl.—[**syn: Potentilla norvegica L. var. hirsuta (Michx.) Lehm.**] Elmira, gardens, fields, 9 Jul 1890, 128 [p.p.] (ECH).
- Potentilla simplex* Michx.—[**syn: Potentilla canadensis L.; Potentilla canadensis L. var. simplex (Michx.) Torr. & A. Gray**] East Elmira, dry soil, variable, 28 May 1887, 365 (ECH); Sullivan Hill, rich soil, 28 May 1882, *s.n.* (BUF, US); East Elmira, 28 May 1887, *s.n.* (BUF); East Elmira, rich soil, 28 May 1887, *s.n.* (BUF, US).
- Potentilla* sp.—near Harrington Ford, banks of the Chemung River, 15 Jun 1897, *s.n.* (BH, BUF, US); Elmira, garden, 9 Jul 1890, *s.n.* (BUF, US); Harrington's Ford, 18 Jun 1898, *s.n.* (?); Mountain House, 3 Aug 1899, 1312 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Hendy Creek, 15 May 1887, *s.n.* (BUF).
- Prunus americana* Marshall—Ashland, 11 May 1887, *s.n.* (BUF); Ashland, Fruit Homestead, 15 May 1879, *Cat. no.729* (BUF); Elmira, Mt Zoar Rd., near Rutan's, 23 May 1893, *s.n.* (BUF, US); Seeley Creek, beyond Payne's shops, 10 May 1884, *s.n.* (BUF); Ashland, Fruit Homestead, 26 May 1882, *s.n.* (BUF); Ashland, 11 May 1887, 551 (ECH).
- Prunus pennsylvanica* L.f.—Far Rockaway, 13 May 1900, 1389 (ECH, BH, BUF, US); Elmira, Mt Zoar, elevated woods and thickets, 12 May 1897, *Cat. no.735* (BUF, US); Ashland, Fruit Homestead, 26 May 1882, *s.n.* (BUF, US); Sullivan Hill, Fruit Homestead, 28 May 1882, *Cat. no.735* (BUF, US); over East Hill, along roads in new land, 9 Oct 1893, 448 (ECH); Mt Zoar Hill, 26 May 1882, 448 (ECH).
- Prunus serotina* Ehrh.—Ashland, 20 Jun 1882, *Cat. no.737* (BUF, US); Ashland, Fruit Homestead, 1 Jun 1879, *Cat. no.737* (BUF, US); Ashland, 20 Jun 1882, *s.n.* (Boise St U.); Ashland, 20 Jun 1882, 353 (ECH).
- Prunus* sp.—Elmira, garden, 2 May 1899, 1170 (BUF, US).
- Prunus spinosa* L.—no location, May 1897, *s.n.* (BKL).
- Prunus spinosa* L. var. *insititia* (L.) A. Gray—Elmira, waste places, 2 May 1897, *s.n.* (BUF); Elmira, 7 May 1898, *s.n.* (?); Elmira, garden, 4 May 1897, *s.n.* (ECH, BH, BUF, US); Elmira, garden, 14 Sep 1897, *s.n.* (?); Elmira, 2 May 1894, 3 (ECH).
- Prunus virginiana* L.—[Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (BUF, US); near Elmira, Orchid Glen, 14 May 1899, 1209 (ECH, BH, BUF, NY, US); Ashland, 29 May 1887, *Cat. no.736* (BH, BUF, US); Elmira, 24 May 1879, *Cat. no.736* (?); near Pickaway, along the Chemung River, 21 May 1897, *s.n.* (ECH, BH, BUF, US); Valley of the Chemung, 18 J., 359 (ECH).
- Rosa blanda* Aiton—Chemung [River], Old Canal, 12 Jun 1893, *s.n.* (?); foot of Sullivan Hill, 3 Jun 1896, *s.n.* (ECH, BH, BUF, NY, MO, US); Sullivan Hill, 1 Aug 1896, *s.n.* (BUF, US); Mt Zoar Hill, near Fitches Bridge, 28 Jul 1892, *s.n.* (?); Latty Brook Road, 2 Sep 1896, *s.n.* (?); along Old Canal, rocky places and rocky shores, 12 Jun 1893, 41 (ECH).
- Rosa carolina* L.—Harrington's Island, swamps, 22 Sep 1897, *s.n.* (BH, BUF, US); Elmira, swamps, 2 Aug 1897, *s.n.* (?); Tomasrarch Swamp, Big Flats, borders of swamps and streams, 8 Jul 1888, 762 [p.p.] (ECH).
- Rosa carolina* L. subsp. *carolina*—[**syn: Rosa humilis Marshall**] up by Mountain House, 2 Sep 1897, *s.n.* (BUF); Sullivan Hill, 9 Jul 1882, *Cat. no.795* (?); Sullivan Hill, dry soil or on rocky slopes, 18 Jun 1896, 281 (ECH).
- Rosa cinnamomea* L.—base of Sullivan Hill, 3 Jun 1896, *s.n.* (BUF); base of Sullivan Hill, N side near Tremain's farm, roadside, escaped, 3 Jun 1896, 749 (ECH).
- Rosa palustris* Marsh—Tomasrarch Swamp, Big Flats, borders of swamps and streams, 8 Jul 1888, 762 [p.p.] (ECH).
- Rosa rubiginosa* L.—Mt Zoar, roadside, 20 Jul 1897, *s.n.* (BUF); Ashland, hillside and fences, 19 Jun 1887, 55 (ECH).
- Rosa* sp.—East Hill, roadside, 24 Jun 1898, *s.n.* (BH, BUF, US).
- Rosa spinosissima* L.—base of Sullivan Hill, near Tremain Farm, N side along road, 3 Jun 1896, *s.n.* (ECH).
- Rosa virginiana* Mill.—[**syn: Rosa lucida Ehrh.**] Mt Zoar Hill, 6 Jul 1893, *s.n.* (?); Lowman, 13 Jul 1882, *Cat. no.795* (?); East Elmira, 5 Jul 1883, *Cat. no.795* (BUF, US).
- Rubus allegheniensis* Porter—[**syn: Rubus villosus Aiton**] Sullivan Hill, borders of thickets, 14 Jun 1882, 350 (ECH).
- Rubus canadensis* L.—Ashland, Fruit Homestead, 2 Jun 1879, *Cat. no.789* (BUF, US); Orchid Glen, East Hill, 22 Jun 1898, *s.n.* (BUF, US); Elmira, on sandy banks, 5 Jun 1887, *s.n.* (?); East Elmira, 4 Jun 1887, 2203 (BUF, US); East Elmira, dry fields, rocky places, 4 Jun 1887, 351 (ECH).
- Rubus flagellaris* Willd.—[**syn: Rubus baileyanus Britton, Rubus villosus Aiton**] Mountain House Narrows, 6 Jun 1898, *s.n.* (BUF, US); Water Cure Hill, 4 Jun 1900, 1419 (ECH, BH, BUF, NY, MO, US); East Elmira, 28 May 1887, *s.n.* (BUF); Ashland, Fruit Homestead, no date, *Cat. no.788* (BUF, US); Sullivan Hill, low woods, thickets, 3 Jun 1894, 350 (?).
- Rubus hispidus* L.—Baldwin Creek near head, low woods or swampy ground, 7 Jul 1889, 382 (ECH).
- Rubus idaeus* L. subsp. *strigosus* (Michx.) Focke—[**syn: Rubus strigosus Michx.**] near Breesport, thickets and hills, 8 Jun 1893, 61 (ECH).
- Rubus occidentalis* L.—Ashland, Fruit Homestead, 14 Jun 1882, *Cat. no.787* (BUF, US); East Elmira, 28 May 1887, 2470 (BUF, US); Elmira, 28 May 1887, 349 (ECH).
- Rubus odoratus* L.—Wellsburg Narrows, 3 Aug 1882, *Cat. no.782* (?); above Horseheads, banks, 10 Jun 1899, 1257 (BUF, US); Mt Zoar Hill, woods, 6 Jul 1893, 1257 (BUF, US); Wellsburg, on rocky canal banks, 14 Jun 1893, *Cat. no. 782* (ECH, BH, BUF, US); Wellsburg Narrows, rocky banks in shade, 14 Jun 1889, 135 (ECH).
- Rubus pubescens* Raf.—[**syn: Rubus triflorus Rich., Rubus triflorus Rich. var. pubescens**] Ashland, near Seeley Creek Bridge, 25 May 1884, 789 (BUF, US); Van Etten's, swamp, 13 Jul 1899, 1280 (?); near Seeley Creek Bridge, Elmira, wooded hillside and hedges, 25 May 1884, 640 (ECH).
- Rubus wiegandii* Bailey—[**syn: Rubus villosus Aiton var. frondosus Torr.**] Sullivan Hill, some situations, 18 Jun 1882, 1081 (ECH).
- Sanquisamba canadense* L.—[**syn: Poterium canadense Benth. & Hook.**] Horseheads, bogs and wet meadows, 23 Aug 1879, 736 (ECH).
- Sorbaria sorbifolia* (L.) A. Br. var. *sorbifolia*—[**syn: Spiraea sorbifolia L.**] Greatsinger's Corner, on crossroads to Tremain's, roadside, 6 Jul 1895, 1296 (ECH, BH, BUF, MICH, MO, NY, NYS, US).
- Sorbaria sorbifolia* (L.) A. Br.—along fence at Greatsinger's Corner, thickets and along fences, 6 Jul 1895, 73 (ECH).
- Spiraea alba* du Roi—[**syn: Spiraea salicifolia L.**] swamp, Old People's Home, Elmira, wet low ground, 9 Jul 1884, 241 (ECH); near a small stream over East Hill, swamps and moist ground, 25 Sep 1896, 241a (ECH).

- Spiraea latifolia* (Aiton) Borkh.—[**syn: Spiraea chamaedryfolia L.**] Hoffman St, Elmira, roadside, an escape or set there, 19 Jul 1899, *s.n.* (ECH).
- Spiraea salicifolia* L.—Elmira, near Old People's Home, swamp, 2 Aug 1897, *s.n.* (ECH, BH, BUF, US); "Bevely" Creek, near Theo. Hermes, swamp, 7 Jul 1889, *s.n.* (BUF, US); over East Hill, by little run, 25 Sep 1896, *s.n.* (BUF, US); West Chemung, 18 Jul 1880, 741 (BH, BUF, US); Elmira, above Knitting Mills, 16 Aug 1899, 1322 (BUF); Elmira, near Old People's Home, swamp, 9 Jul 1884, *s.n.* (?).
- Spiraea sorbifolia* (L.) A. Br. var. *sorbifolia*—[**syn: Spiraea sorbifolia L.**] Elmira, 29 Jun 1899, 1296 (?).
- Spiraea* sp.—Elmira, Hoffman St, 19 Jul 1899, 1303 (BUF).
- Waldsteinia fragarioides* (Michx.) Tratt.—Wellsburg, near woods, 23 May 1897, *s.n.* (BUF, US); Baldwin, 26 May 1899, 764 (ABSL); no location, 1 Jul 1886, *s.n.* (ABSL); Hendy Creek, wooded hillsides, 15 May 1887, 222 (ECH).
- Rubiaceae**
- Cephalanthus occidentalis* L.—Elmira, Aug 1894, *s.n.* (BKL); Ashland, near Wellsburg, swamps and along streams, 25 Jul 1881, 797 (ECH).
- Galium aparine* L.—Ashland, shaded grounds, 21 May 1882, 678 (ECH).
- Galium asprellum* Michx.—Big Flats, Lowe's Pond, 18 Jul 1888, 424 (ECH).
- Galium boreale* L.—Ashland, 15 Jun 1881, 60a (BUF, US); Rorick's Glen, rocky banks of streams, 19 Aug 1888, 60 (ECH).
- Galium lanceolatum* Torr.—Ashland, Sullivan Hill, Fruit Homestead, line E side of woods, 29 Jun 1879, 54a (BUF, US); Mt Zoar Hill woods, dry upland woods, 10 Jul 1892, 54 (ECH).
- Galium mollugo* L.—Elmira, garden, in fields and waste places, 4 Jun 1899, 1293 (ECH).
- Galium pilosum* Aiton—pasture N of Van Etten's Swamp, in dry or sandy soil, 13 Jun 1899, 1265 (ECH).
- Galium* sp.—Carpenter's Ridge, 15 Jun 1880, *s.n.* (BUF).
- Galium trifidum* L. subsp. *subbiflorum* (Wiegand) Puff—[**syn: Galium trifidum L. var. pusillum A. Gray**] Big Flats, Lowe's pond, 8 Jul 1888, *s.n.* (BUF, US).
- Galium triflorum* L.—Wellsburg Swamp, woodlands, rich soil, 12 Aug 1892, 187 (ECH).
- Galium trifidum* L. subsp. *tinctorium* (L.) Hara—Lowe's Pond, Big Flats, wet places and marshes, 8 Jul 1888, 388 (ECH).
- Houstonia caerulea* L.—Ashland, moist grassy places, 16 Jun 1883, 217 (ECH).
- Mitchella repens* L.—low swampy woods near Tremain's, woods, low ground, 27 Jun 1894, 375 (ECH).
- Rutaceae**
- Xanthoxylum americanum* Mill.—Ashland, rich low soil, 13 Aug 1879, 594 (ECH);
- Zanthoxylum americanum* Mill.—Elmira, 20 May 1883, *s.n.* (?); Ashland, Morse Farm, 13 Aug 1879, 431 (BUF).
- Salicaceae**
- Populus alba* L.—Elmira, 7 May 1899, 1200 (BUF, US).
- Populus canadensis* Aiton—[**syn: Populus balsamifera L. var. canadensis (Aiton) A. Gray**] Elmira, near Reformatory, 8 May 1887, *s.n.* (BUF); Elmira, Water Cure Hill, 14 May 1900, 1399 (BUF, US); Elmira, 3 May 1895, *s.n.* (BUF).
- Populus deltoides* Bartr. ex Marsh.—on Seeley Creek, 6 Jun 1900, 1427 (ECH, BH, BUF, NY, US).
- Populus deltoides* Bartr. ex Marsh. var. *occidentalis* Rydb.—[**syn: Populus monilifera Aiton**] Seeley Creek, 24 Apr 1899, *s.n.* (BUF); Elmira, Old Canal, by [Trine?] to garden on river banks, 9 Sep 1894, *s.n.* (BUF); tree by bridge by Grist Mill, 28 Apr 1895, *s.n.* (BUF).
- Populus grandidentata* Michx.—Sullivan Hill, on southern slopes, 10 Aug 1883, 2645 (BUF); Elmira, Mt Zoar Hill, 3 May 1894, *s.n.* (BUF, US); Pine City, Christian Hollow, 25 Apr 1895, *s.n.* (BUF); Old Mountain House, 6 May 1895, *s.n.* (BUF).
- Populus nigra* L. var. *italica* (Moench.) Koehne—[**syn: Populus dilatata L.**] Newtown, Chemung Narrows, 30 Sep 1897, *s.n.* (BUF, US).
- Populus* sp.—growing up East Hill, left hand bank, 2 May 1899, 1199 (ECH, BH, BUF, US); Elmira, near Reformatory, 19 Jul 1899, 1308 (ECH, BH, BUF, MICH, MO, NY, NYS, US).
- Populus tremuloides* Michx.—Lowman's Swamp, 30 Apr 1896, *s.n.* (BUF); Elmira, Water Cure Hill, 23 Jun 1893, *s.n.* (BUF); Ashland, 1 May 1887, 7632 (BUF); Ashland, Fruit Homestead, Sullivan Hill, 1 Jan 1897, 2644 (BUF); Lowman's Swamp, 28 Apr 1895, *s.n.* (?).
- Salix alba* L. subsp. *caerulea* (Sm.) Rech. f.—[**syn: Salix alba L. var. caerulea**] Seeley Creek, 24 Jun 1898, *s.n.* (BUF, US).
- Salix alba* L.—[**syn: Salix alba L. var. vitellina (L.) Koch.**] no location, 23 May 1897, *s.n.* (BUF); Fitch's Bridge, 24 May 1887, 7872 (BUF); by Harrington's Mill, 23 May 1899, 1224 (ECH, BH, BUF, MICH, MO, NY, NYS, US).
- Salix babylonica* L.—Elmira, 26 May 1897, *s.n.* (BUF).
- Salix bebbiana* Sargent—[**syn: Salix rostrata Rich.**] Seeley Creek Bridge, hill above, 5 May 1889, *s.n.* (BH, BUF, US); Greatsinger's Corner, swamp above, 10 May 1895, *s.n.* (BUF); Hendy Creek, 15 May 1887, *s.n.* (BUF); road to Breesport, 8 Jun 1893, *s.n.* (BUF); Seeley Creek, 10 May 1894, *s.n.* (BUF, US); Horseheads, up Latty Brook, 13 May 1898, *s.n.* (BUF); Botany Swamp, 6 May 1894, *Cat. no. 834* (BH, BUF, US); Elmira, Mt Zoar Hill, 3 May 1894, *s.n.* (BUF, US); on Baldwin Creek, 19 May 1899, *s.n.* (BUF); by Rutan Farm 12 mi away, [] swamp, 10 May 1896, *s.n.* (BUF, US); Jenkin's Woods, 2 May 1899, *Cat. no. 1176* (BUF, US); Jenkin's Woods, 2 May 1899, *Cat. no. 1197* (BUF, US); over East Hill, 16 May 1894, *s.n.* (BUF).
- Salix cordata* x *discolor*—Elmira, Old Canal, just below the family farm, on right hand roadside; high banks, 25 Sep 1898, *s.n.* (BUF).
- Salix cordata* x *sericea*—Elmira, Arnot's Canal, 10 Sep 1893, *s.n.* (BUF); Elmira, Old Canal, 14 Sep 1897, *s.n.* (BUF); Elmira, Old Canal, line end, wet places, 28 Sep 1898, 1166 (BUF); Elmira, Arnot's Canal, 10 Sep 1893, *s.n.* (BUF); Horseheads, on Latty Brook, 13 May 1898, *s.n.* (BH, BUF, US).
- Salix discolor* Muhl.—near Far Rockaway, 13 May 1900, 1381 (BUF, US); back of Driving Park, along edge of river, 18 Apr 1896, *s.n.* (BUF); no location, 14 Apr 1897, *s.n.* (BUF); Elmira, 14 Apr 1897, *s.n.* (BUF); Pine City, Christian Hollow, 25 Apr 1895, *s.n.* (BUF); Botany Swamp, 18 Apr 1896, *s.n.* (BUF); Elmira, Old Canal, 14 Sep 1897, 1899 (BUF, US); Elmira, in Old Canal, 26 Apr 1896, *s.n.* (BUF, US); Elmira, near road, 14 Apr 1897, *s.n.* (BUF); Seeley Creek, 26 May 1896, *s.n.* (?); Chemung River, bank near old Rob, near tracks, 25 Apr 1895, *s.n.* (BUF); Lowman's Swamp, tree near a stump N edge of swamp, 28 Apr 1895, *s.n.* (BUF, US).
- Salix eriocephala* Michx.—[**syn: Salix cordata Muhl.; Salix cordata Muhl. var. angustata (Pursh) Anderss.**] along Chemung River, 3 May 1882, *s.n.* (BUF); Far Rockaway, on flats, 13 May 1900, 1380 (BUF, US); Seeley Creek, 10 May 1894, *s.n.* (BUF); Southport, Seeley Creek, 29 May 1897, *s.n.* (BUF); Jenkin's Woods, along creeks, 2 May 1899, 1194 (BUF, US); Hendy Creek, 1 May 1898, *s.n.* (BUF, US); Far Rockaway, 13 May 1900, 1379 (ECH, BH, BUF, NY, US); Seeley Creek, no date, *s.n.* (BUF); Seeley Creek, 24 Jun 1898, *s.n.* (BUF); along Chemung River, no date, *s.n.* (BUF); Hendy Creek, 1 May 1898, *s.n.* (BUF, US); on Seeley Creek, 24 Apr 1897, *s.n.* (BUF, US); near Wellsburg, 14 Jun 1889, *s.n.* (BUF); Elmira, along Old Canal, 30 Apr 1896, *s.n.* (BUF); no location, 13 May 1896, *s.n.* (?); Seeley Creek, 29 May 1897, *s.n.* (BUF); along Old Canal, 28 Apr 1895, *s.n.* (BUF).

- Salix fragilis* L.—Elmira, N of Old Mill on E Water Street, Old High Mills, 25 Sep 1898, *s.n.* (BUF, US).
- Salix glauca* L.—East Hill, 1 May 1900, 1369 (BUF, US).
- Salix humilis* x *bebbiana*—Elmira, Mt Zoar Hill road, 18 Sep 1898, 1168 (BUF).
- Salix humilis* x *discolor*—Pine City, Christian Hollow, 25 Apr 1895, *s.n.* (BUF); Harrington's Island, 7 May 1888, *s.n.* (BUF, US); Ashland, hill near Seeley Creek, 5 May 1889, *s.n.* (BUF, US); East Hill, left road, 5 Oct 1899, 1366 (BUF); Elmira, Mt Zoar Hill Road, 18 Sep 1898, 1171 (BUF); Elmira, Mt Zoar Hill, upland, dry or wet, 3 May 1894, 1168 (BUF).
- Salix humilis* Marsh.—Elmira, Mt Zoar Hill, 18 Sep 1898, 1169 (BUF); Pine City, head of Christian Hollow, 2 Jun 1897, *s.n.* (BUF); Elmira, Mt Zoar Hill woods, 28 May 1893, *s.n.* (BUF); East Elmira, road to H. Krause, 8 May 1893, *s.n.* (BUF); Jenkin's Woods, 2 May 1899, 1172 (ECH, BH, BUF, US); upland over East Hill, 13 May 1894, *s.n.* (BUF); Elmira, Water Cure Hill, roadside, 21 May 1900, 1405 (BUF, US).
- Salix humilis* Marsh. var. *tristis* (Aiton) Griggs—[**syn: Salix tristis Aiton**] Pine City, Christian Hollow, 25 Apr 1895, *s.n.* (BUF); Wellsburg, 16 Apr 1880, *s.n.* (BUF); Wilkes swamp, 23 Apr 1882, *s.n.* (BUF); Wellsburg, 16 Apr 1880, *Cat. no. 2632* (BUF); Ashland, Fruit Homestead, 25 May 1879, *Cat. no. 2632* (?).
- Salix longifolia* Muhl.—Chemung River banks, 8 Jul 1882, *Cat. no. 2634* (BUF).
- Salix lucida* Muhl.—Seeley Creek, 24 Jun 1898, *s.n.* (BUF, US); Seeley Creek, 29 May 1897, *s.n.* (?); on Dry Run, 11 Jun 1898, *s.n.* (BUF, US); Botany Swamp, 15 May 1897, *s.n.* (ECH, BH, BUF, US); Seeley Creek, Jones District, along streams, 10 May 1896, *s.n.* (BUF, US).
- Salix melanopsis* Nutt—[**syn: Salix fluviatilis Nutt.**] along the Chemung River, 4 Jun 1897, 1168 (BH, BUF, US); Chemung Narrows, mouth of the Old Canal, 30 Sep 1897, *s.n.* (BUF).
- Salix myricoides* Muhl.—Hoffman Creek, near Reservoir, 7 Aug 1898, *s.n.* (BUF); Seeley Creek, 24 Jun 1898, *s.n.* (BUF); Elmira, above Knitting Mills, 16 Aug 1899, 1321 (BH, BUF, US).
- Salix nigra* x *alba*—Seeley Creek near town, 21 May 1896, *s.n.* (BH, BUF, US).
- Salix nigra* Marsh.—[**syn: Salix nigra Marsh. var. falcata**] Big Island, frequent near water, 21 May 1887, *s.n.* (BUF, US); Ashland, Fruit Homestead, Chemung River, 14 Jun 1882, 2021 (BUF, US); Hedy Creek, 16 Sep 1893, *s.n.* (BUF); near Big Flats, 6 Jun 1898, *s.n.* (BUF, US); Chemung Narrows near Old Canal mouth, 30 Sep 1897, *s.n.* (BUF); Chemung Narrows, 30 Sep 1897, *s.n.* (BUF, US); Rorick's Glen, 7 Jun 1888, *s.n.* (?); Elmira, Old Canal, below city, 25 Sep 1898, *s.n.* (BUF).
- Salix petiolaris* Sm.—Hedy Creek, 25 Apr 1897, *s.n.* (BH, BUF, US); Hedy Creek, 25 Apr 1897, *s.n.* (BH, BUF, US); Hedy Creek, 25 Apr 1897, *s.n.* (ECH, BH, BUF, US); Elmira, on bank of Old Canal, 26 Apr 1896, *s.n.* (BUF).
- Salix purpurea* L.—Elmira, by Old People's Home, 27 Sep 1897, *s.n.* (BUF); Elmira, near Newtown Creek, 8 Aug 1892, *s.n.* (BUF).
- Salix sericea* x *cordata*—no location, 27 Jul 1898, 1145 (BUF); Elmira, near line, Reservoir, creek, 1 May 1896, *s.n.* (BUF); Botany Swamp, 6 May 1894, *s.n.* (BUF); near Tremain's, right hand side, edge of road, 28 Sep 1898, *s.n.* (ECH, BH, BUF, US).
- Salix sericea* x *discolor*—Greetsinger's Corner, swamp, 9 Oct 1893, *s.n.* (BUF).
- Salix sericea* Marsh.—Hedy Creek, 1 May 1898, *s.n.* (BUF, US); Hedy Creek, 16 Sep 1893, *s.n.* (BUF, US); Jenkin's Woods, along creek, 2 May 1899, 1196 (BUF, US); Seeley Creek, 29 May 1899, *s.n.* (BUF, US); [over East Hill], 31 May 1897, *s.n.* (BUF, US); Little Creek over East Hill, 31 May 1897, *s.n.* (BUF, US); Jenkin's Woods, on creek, 2 May 1899, 1198 (ECH, BH, BUF, MICH, MO, NY, US).
- Salix* sp.—Elmira, Mt Zoar Hill, 18 Sep 1898, 1170 (BUF); foot of East Hill, other side, 5 Oct 1899, *s.n.* (BH, BUF, US); above Greetsinger's Corner, swamp, 10 May 1895, *s.n.* (BUF); over East Hill, crossroad to little creek, 31 May 1897, *s.n.* (BUF); near Botany Swamp, roadside by cleared swamp, 14 Apr 1897, *s.n.* (BUF); Orchid Glen Quarry, 14 May 1899, 1216 (BUF); Elmira, Water Cure Hill, near Mrs. Cranes, head of gully, 14 May 1900, 1397 (BH, BUF, US); roadside just over East Hill, near crossroad, 2 May 1899, 1171 (BUF, US); over East Hill, by Creek Bridge, East Hill Road, 1 May 1900, 1370 (BH, BUF, US); Jenkin's Woods, 20 May 1899, 1368 (BUF); Jenkin's Woods, 1 May 1900, 1195 (BUF, US); bog, 12 mi away, 10 May 1896, *s.n.* (BUF); by old Grist Mill on Newtown Creek, 14 May 1899, 1203 (BH, BUF, US); bed of Old Canal, 4 Jun 1897, *s.n.* (BUF); Chemung Narrows, 30 Sep 1897, *s.n.* (BUF).
- Indet.—on Seeley Creek, 6 Jun 1900, 1421 (ECH, BH, BUF, MICH, MO, NY, US).

Santaceae

Comandra umbellata (L.) Nutt.—Ashland, Fruit Homestead, 25 May 1879, *Cat. no. 2454* (BUF); Ashland, Fruit Homestead, 4 Jun 1882, *s.n.* (BUF); Elmira, Water Cure Hill, roadside, 21 May 1900, 1407 (BUF); Sullivan Hill, Fruit Homestead, 9 Jun 1882, 2454 (BUF, US); no location, 22 Jun 1878, *Cat. no. 2454* (BUF); Sullivan Hill, dry ground, copses, 9 Jun 1887, 652 (ECH).

Saxifragaceae

- Chrysosplenium americanum* Schwein.—Lowman's Swamp, cold wet places, in shade, 8 May 1893, 666 (ECH).
- Mitella diphylla* L.—Hedy Creek, hillside in rich woods, 15 May 1887, 224 (ECH).
- Philadelphus coronarius* L.—deserted garden near Pine Valley, cultivated in gardens, 19 Jun 1897, 1086½ (ECH).
- Saxifraga pennsylvanica* L.—Lowman's Swamp, bogs, swamps, 23 May 1880, 329 (ECH).
- Saxifraga virginiana* Michx.—Wellsburg Narrows, exposed rocks and hillsides, 19 May 1882, 543 (ECH).
- Tiarella cordifolia* L.—Lowman's Swamp, rich rocky woods, 10 May 1884, 227 (ECH).

Scrophulariaceae

- Aureolaria pedicularia* (L.) Raf. ex Farw. subsp. *intercedens* (Pennell) Pennell—[**syn: Gerardia pedicularia L.**] hill above Rorick's Glen, dry woods and near ravines, 19 Aug 1888, 413 (ECH).
- Aureolaria tenuifolia* (Vahl.) Raf. var. *tenuifolia*—[**syn: Gerardia tenuifolia Vahl.**] Sullivan Hill, on dry hill, 31 Aug 1881, 120 (ECH).
- Aureolaria virginica* (L.) Pennell—[**syn: Dasystoma flava (L.) Wood, Gerardia flava L.**] woods near Mrs. Crane's, Water Cure Hill, in dry woods and thickets, 30 Aug 1896, 174 (ECH); Sullivan Hill, open upland woods, 10 Aug 1882, 174 (ECH).
- Chelone glabra* L.—slope S of entrance to Latty Brook Road, in a moist springy place, 2 Sep 1896, 211a (ECH); Rorick's Glen, wet places, swamps, 19 Aug 1888, 211 (ECH).
- Griatiola neglecta* Torr.—[**syn: Griatiola virginiana L.**] Elmira, muddy shores and fields, 19 Jun 1887, 718 (ECH).
- Linaria vulgaris* Mill.—Lowe's Pond, Big Flats, fields and roadside, 8 Jul 1888, 62 (ECH).
- Lindernia dubia* (L.) Pennell subsp. *major* (Pursh) Pennell—[**syn: Ilysanthes riparia Raf.**] Decker's Cove, Harrington Island, wet places, 3 Jul 1880, 766 (ECH).
- Melampyrum lineare* Desr. var. *americanum* (Michx.) Beauverd—[**syn: Melampyrum americanum Michx.**] Mt Zoar Hill, open hill woods, 30 Aug 1896, 202a (ECH).
- Melampyrum lineare* Lam. var. *latifolium* (Muhl.) Pennell—Mt Zoar Hill, in dry woods and thickets, 26 Jul 1895, 202 (ECH).
- Mimulus ringens* L.—frequent in swamps and along springs, 20 Jul

- 1893, 154 (RM); Lowman, Ashland, wet shores along streams, 4 Aug 1882, 154 (ECH, RM).
- Pedicularis canadensis* L.—Sullivan Hill, open woods and ravines, 16 Jun 1884, 242 (ECH).
- Penstemon hirsutus* (L.) Willd.—[syn: **Penstemon pubescens Solander**] Elmira, dry or rocky ground, 4 Jun 1887, 59 (ECH).
- Scrophularia lanceolata* Pursh—[syn: **Scrophularia nodosa L. var. marilandica Gr.**] Elmira, damp grounds along streams, 19 Jun 1887, 289 (ECH).
- Verbascum blattaria* L.—½ mi above Hoffman dist.[?] school house, in fields and waste places, 17 Aug 1897, 378a (ECH).
- Verbascum thapsus* L.—Rorick's Glen, old dry fields, 14 Jul 1893, 151 (ECH).
- Veronica americana* (Raf.) Schwein. ex Benth.—Searles Farm, Ashland, brooks and ditches, 7 Jun 1880, 291 (ECH).
- Veronica arvensis* L.—Searles Farm, Ashland, cultivated grounds, 1 Jun 1882, 358 (ECH).
- Veronica officinalis* L.—East Elmira, dry hills and open woods, roadside, 17 Jun 1882, 679 (ECH).
- Veronica peregrina* L.—[Elmira], gardens, wasted and cultivated grounds, 7 Jun 1884, 680 (ECH).
- Veronica scutellata* L.—swamp near Old People's Home, bogs, marshy places, 28 Jun 1884, 704 (ECH).
- Veronica serpyllifolia* L.—Searles Farm, Ashland, roadside and fields, 1 Jun 1882, 455 (ECH).
- Veronica spicata* L.—roadside near Greatsinger's Corner, meadows and roadside in grass, 17 Jul 1896, s.n. (ECH).
- Veronicastrum virginicum* (L.) Farw.—[syn: **Leptandra virginica (L.) Nutt.**] wood near old state fair grounds, rich woods, alluvial, 28 Jul 1884, 546 (ECH); near Mrs. Crane's, Water Cure Hill, dry woods, in meadows, moist woods and thickets, 30 Aug 1896, 546a (ECH).
- Simaroubaceae**
- Ailanthus altissima* (Mill.) Swingle—[syn: **Ailanthus glandulosus Desf.**] 5th Ward, introduced and escaping, 3 Jul 1894, 1056 (ECH); Elmira, cultivated and escaped in same location, 7 Aug 1896, 1056 (ECH).
- Smilacaceae**
- Smilax herbacea* L.—swamp on Wilks Jenkins Farm, woods and thickets, 6 Jun 1880, 361 (ECH);
- Smilax hispida* Muhl. ex Torr.—swamp, East Elmira, moist meadows and river banks, 6 Jun 1880, 361 (ECH);
- Smilax tamnoides* L. var. *hispida* (Muhl.) Fern.—[syn: **Smilax hispida Muhl. ex Torr.**] Big Island, Chemung River, woods and swamps, 8 Jun 1887, 763 (ECH).
- Solanaceae**
- Lycium halimifolium* Mill.—[syn: **Lycium vulgare Dunal.**] Searles Farm, about dwellings, 28 Jun 1887, 68 (ECH).
- Nicandra physalodes* (L.) Gaertn.—Elmira, waste grounds, gardens, Aug 1883, 905 (ECH).
- Physalis grisea* (Waterf.) M. Martinez—[syn: **Physalis pubescens L. var. grisea Waterf.**] no location, no date, s.n. (NY); no location, Jul 1897, s.n. (BKL).
- Physalis heterophylla* Nees var. *ambigua* (Gray) Rydb.—Baldwin Creek, 21 Jul 1880, 771 (ECH).
- Physalis pruinosa* L.—[syn: **Physalis pubescens L.**] Elmira, gardens, low ground, 24 Sep 1893, 969 (ECH); Elmira, gardens, low ground, 15 Aug 1888, 969 (ECH).
- Physalis pubescens* L.—Elmira, garden, 9 Aug 1898, s.n. (BUF, US); Elmira, garden, 26 Jul 1896, s.n. (BUF, US); Elmira, garden, 22 Jul 1898, s.n. (BUF, US); Elmira, garden, 19 Jul 1987, s.n. (BUF, US); Elmira, garden, 3 Aug 1898, s.n. (ECH, BH, BUF, US, MO).
- Solanum dulcamara* L.—Big Island, banks of the Chemung River, near ford, 8 Jun 1886, 5971 (ECH, BH, BUF, US); Horseheads, above, 10 Jun 1898, 1259 (BUF); Elmira, Mt Zoar Rd, crossroad, 10 Jun 1895, s.n. (ECH, BH, BUF, US); bank Chemung River, Southport, hedges, thickets and swamps, 8 Jun 1886, 136 (ECH).
- Solanum nigrum* L.—Elmira, garden, 13 Jul 1896, s.n. (BUF); Big Island, 14 Sep 1888, s.n. (BUF); Elmira, garden, 7 Jul 1896, s.n. (?); Elmira, garden, 31 Jul 1896, s.n. (?); Elmira & Big Flats, Chemung River, in gardens, 7 Jul 1896, 7843 (NY); Big Island, Chemung River, shaded grounds and fields, 14 Sep 1888, 981 (ECH).
- Taxaceae**
- Taxus baccata* L. subsp. *canadensis* (Marsh.) Pilger—[syn: **Taxus canadensis Willd.**] ravines and cool soil, 1897, s.n. (ECH).
- Taxus canadensis* Marsh.—[syn: **Taxus baccata L. var. canadensis (Marsh.) A. Gray**] Lowman, 18 Apr 1880, 2673 (MO).
- Thymelaeaceae**
- Dirca palustris* L.—Lowman's Swamp, 8 May 1897, s.n. (BUF, US); Lowman's Swamp, 30 Apr 1896, s.n. (BH, BUF, US); Lowman's Swamp, damp rich soil, swamps, 28 Apr 1882, 749 (ECH).
- Tiliaceae**
- Tilia americana* L.—rich woods, 14 Jul 1896, s.n. (?); along the Chemung River, rich woods along streams, 14 Jul 1893, 503 (ECH).
- Typhaceae**
- Sparganium chlorocarpus* Rydb.—[syn: **Sparganium simplex Hudson**] Lowman's Cove, marshes and standing water, 3 Jul 1880, 768 (ECH).
- Sparganium eurycarpum* Engelm.—borders of pond, lakes and rivers, 4 Jun 1899, 1241 (ECH).
- Sparganium simplex* Hudson var. *androcladum* Engelm.—Big Flats, Lowe's pond, in still water, 8 Jul 1888, *Oyster no. 8605 var. 2* (BUF).
- Typha latifolia* L.—Elmira, marshes, 25 Jun 1879, 702 (ECH).
- Ulmaceae**
- Ulmus americana* L.—by Pickaway, 30 Jul 1897, s.n. (BUF); Ashland, 13 May 1887, s.n. (?); Ashland, Fruit Homestead, 27 Apr 1879, *Cat. no. 2538* (BUF); Ashland, 3 May 1887, s.n. (BUF); Ashland, 18 Apr 1882, 7463 (BUF); Mountain House Narrows, along Chemung River, 6 May 1896, s.n. (BUF); Ashland, Fruit Homestead, 18 Apr 1882, 2538 (BUF); banks of Water Works Reservoir, 14 Apr 1897, s.n. (BH, BUF, US); up river, 2 Sep 1897, s.n. (BUF); Valley of the Chemung River, in moist soil especially along streams, 11 May 1887, 214 (ECH); no location, May 1897, s.n. (BKL); Ashland, moist woods along river, 18 Apr 1882, 214 (ECH).
- Ulmus rubra* Muhl.—[syn: **Ulmus fulva Michx.; Ulmus pubescens Walter**] Water Works Reservoir (Elmira), upland woods & along rivers, 14 Apr 1897, s.n. (BUF); Elmira, upland woods and along rivers, 23 Apr 1882, *Cat. no. 2536* (BUF); up river, 2 Sep 1897, *Cat. no. 2536* (?); Elmira, rich soil, rocky banks, along streams, 23 Apr 1882, 635 (ECH); [Water Works Reservoir, Elmira], upland woods and along rivers, 14 Apr 1897, *Pat. no. 9640* (NEB).
- Ulmus thomasi* Sarg.—[syn: **Ulmus racemosa D. Thomas**] Elmira, 11 May 1887, 2539 (BUF); Ashland, 1 May 1887, s.n. (?); near Mountain House, 6 May 1896, s.n. (?); [Rorick's Glen], in rich woods & along rivers, 7 May 1897, s.n. (BH, BUF, US); no location, 2 Sep 1897, s.n. (?); Elmira, Old Canal, 14 Sep 1897, s.n. (BUF, US); East Elmira, 22 Apr 1882, 2539 (?); [Rorick's Glen], in rich woods & along rivers, 7 May 1897, *Pat. no. 9641* (F).
- Urticaceae**
- Humulus lupulus* L.—Ashland, Lowman's Flats, 10 Aug 1883, s.n. (BUF); Harrington Island, 9 Aug 1885, 525 (ECH).
- Laportea canadensis* (L.) Gaudich.—Harrington Island, moist rich woods, 9 Aug 1885, 524 (ECH).

Pilea pumila (L.) A. Gray—Elmira, 18 Sep 1897, 7487 (BUF, US); Elmira, garden, 17 Aug 1899, 1337 (ECH, BH, BUF, US); Elmira, cool and moist shaded places, 18 Sep 1887, 733 (ECH).

Urtica dioica L. subsp. *gracilis* (Aiton) Solander—[**syn: Urtica gracilis Aiton, Urtica gracilis Aiton subsp. gracilis (Aiton) Selander**] Harrington's Island, 22 Jul 1884, *s.n.* (BUF); eastern part of the City [Elmira], near old Brick Pond, 16 Aug 1899, 1318 (BUF, US); Harrington's Island, on alluvial, in shade, 22 Jul 1884, 7488 (BUF); Pickaway, at the Cottages, river banks, 30 Jul 1897, *s.n.* (BUF, US); Harrington Island, in moist alluvial soil, 3 Aug 1893, 526 (ECH); roadside over East Hill, in dry soil, 17 Aug 1897, 1006 (ECH).

Valerianaceae

Valeriana officinalis L.—near Pine Valley, derelict garden, 19 Jun 1897, *s.n.* (BUF, US); near Pine Valley, derelict garden, 19 Jun 1897, 1086 (BUF); escaped just N of Pine Valley, roadside and old gardens, 19 Jun 1897, 1086 (ECH).

Verbenaceae

Phryma leptostachya L.—Ashland, 24 Jul 1880, 1974 (BUF).

Verbena hastata L.—West Chemung, 18 Jul 1880, *Cat. no. 1956* (BUF, US); Elmira, 16 Aug 1899, 1327 (BUF, US).

Verbena hastata L. var. *paniculata* (Lam.) Farw.—Fitches Bridge, Southport, waste ground and roadside, 18 Jul 1884, 770 (ECH).

Verbena urticifolia L.—near Riverside Park, 9 Jul 1898, *s.n.* (BUF, US); Elmira, garden, 16 Jul 1896, *s.n.* (BUF, US); Harrington's Island, in moist fields, meadow and waste places, 4 Sep 1895, 770a (ECH); Elmira, garden, waste or open ground, 29 Jul 1893, 126 (ECH).

Violaceae

Viola blanda Willd.—[**syn: Viola blanda Willd. var. palustriformis A. Gray**] up Latty Brook, beechwood, 13 May 1898, *s.n.* (BUF); Lowman's Swamp, 30 Apr 1896, *s.n.* (BUF); Greatsinger's Corner, swampy woods, 21 May 1882, 210 (?); [Elmira], swampy woods, 4 May 1896, 210 (?); Jenkin's Woods, 2 May 1899, 1181 (BUF, US); Elmira, near bog, 12 mi away, woods, 10 May 1896, *s.n.* (?); no location, 12 May 1878, 210 (BUF); Lowman's Swamp, shaded mossy ground, 11 May 1887, 935 (ECH).

Viola canadensis L.—rich moist woods, 8 Jun 1896, *Cat. no. 221* (?); Baldwin, 26 May 1879, *Cat. no. 221* (BUF); Far Rockaway, 5 mi W of Elmira, 13 May 1900, 1382 (ECH, BH, BUF, MICH, MO, NY, NYS, US); Baldwin, 26 May 1880, 221 (ECH, BH, BUF, US); this side of Breesport, 8 Jun 1893, 221 (?); Baldwin, rich woods, ravines, 26 May 1880, 446 (ECH).

Viola cucullata L.—[**syn: Viola obliqua Hill**] Jenkin's Woods, 2 May 1899, 1174 (BUF); D.L.&W. railroad, 21 May 1882, *s.n.* (BUF); Pickaway, 21 May 1897, *s.n.* (BUF, US); Lowman's Swamp, 11 May 1887, *s.n.* (BUF); Lowman's Swamp, 30 May 1884, *s.n.* (BUF).

Viola labradorica Schrank—[**syn: Viola canina L. var. sylvestris Regel**] Lowman's Swamp, frequent in wet grounds, 11 May 1887, *s.n.* (BUF); Tremain's, low ground, 8 May 1893, *s.n.* (BUF); Greatsinger's Corner, swampy marsh, May 1896, *Pat. no. 786* (BUF, US).

Viola langsdorffii Fisch. ex Ging.—[**syn: Viola canina L. var. muhlenbergii A. Gray**] Lowman's Swamp, 6 May 1880, *Cat. no. 218* (BUF); Levy Hill Road, ravine in woods near Levy Hill road, 23 May 1893, *s.n.* (BUF, US); over East Hill, 13 May 1894, *s.n.* (BUF, US); Greatsinger's Corner, swampy woods, low shady grounds, 27 May 1897, *s.n.* (BUF, US); Lowman's Swamp, damp or wet shady places, 11 May 1887, 644 (ECH).

Viola macloskeyi F.E. Lloyd—[**syn: Viola pallens (Banks ex DC.) Brainerd**] Lowman's Swamp, damp grassy places, swamps, 6 May 1880, 7 [p.p.] (ECH).

Viola obliqua Aiton—[**syn: Viola palmata L. var. cucullata (Aiton)**

A. Gray] Elmira, garden, 2 Jul 1884, *s.n.* (BUF); [Greatsinger's Corner], swampy woods, 8 Jun 1894, *s.n.* (BUF).

Viola palmata L.—[**syn: Viola cucullata L. var. palmata (L.)**

A. Gray] Elmira, above fairgrounds, 5 Jun 1894, *s.n.* (?); Horseheads, woods near fairground, 22 May 1896, *s.n.* (BUF); East Hill, near Stone Quarry, 26 May 1896, *s.n.* (BUF, US); Elmira, Water St., near fairgrounds, woods ½ mi above fairgrounds, 2 Jun 1884, 612 var. 2 (BUF); Horseheads & Elmira, woods in between cities, 23 May 1884, *s.n.* (BUF); Jenkin's Woods at Greatsinger's Corner, 9 May 1898, *s.n.* (BUF, US); Elmira, Jun 1896, *s.n.* (BKL); rocky woods near Mrs. Crane's, in dry soil mostly in woods, 24 May 1896, 907 (ECH).

Viola pubescens Aiton var. *scabriuscula* Torr. & A. Gray—[**syn: Viola eriocarpa Schwein., Viola pennsylvanica Michx.**] Ashland, 11 May 1879, *Cat. no. 222* (?); [Jenkin's Woods], swampy woods, 14 May 1896, *s.n.* (?); Jenkin's Woods, 28 Apr 1896, *s.n.* (BUF); Greatsinger's Corner, swampy woods, 28 Apr 1896, *s.n.* (BUF); Jenkin's Woods, 9 May 1898, *s.n.* (BH, BUF, US).

Viola pubescens Aiton—Lowman's Swamp, 11 May 1887, *s.n.* (BUF, US); Elmira, Mt Zoar Hill woods, 7 Jun 1893, *s.n.* (BUF, US); Elmira, Mt Zoar Hill woods, 10 Jun 1895, *s.n.* (BUF); on Big Island, banks of the Chemung River, 28 Apr 1897, *Cat. no. 222* (?); Mt Zoar Hill, in rich woods, 7 Jun 1893, 229a (ECH); Lowman's Swamp, ravines, rich woods, 11 May 1887, 229 [p.p.] (ECH).

Viola renifolia A. Gray—Lowman's Swamp, damp grassy places, swamps, 6 May 1880, 7 [p.p.] (ECH).

Viola rostrata Pursh—Jenkin's Woods, 2 May 1899, 1187 (ECH, BH, BUF, NY, MO, US); Southport, Coleman's Glen, 8 May 1887, *s.n.* (BUF, US); Jenkin's Woods, 9 May 1898, *s.n.* (BUF, US); Latty Brook Road, beechwoods, right fork of road, 13 May 1898, *s.n.* (BH, BUF, US); Elmira, Reservoir, woods back of upper reservoir, 29 May 1898, *s.n.* (BH, BUF, US); Erin, 16 May 1880, *Cat. no. 219* (BH, BUF, US); Erin, shaded hillsides, rich woods, 16 May 1880, 445 (ECH).

Viola rotundifolia Michx.—Jenkin's Woods, 1 May 1900, 1371 (ECH, BH, BUF, MICH, MO, NY, US); Jenkin's Woods, 2 May 1899, 1173 (BH, BUF, US); Greatsinger's Swamp, cold woods, 1 May 1880, 674 (ECH).

Viola sagittata Aiton—Pickaway, F[itch's] Bridge, 6 May 1897, *s.n.* (BUF); Pickaway, 21 May 1897, *s.n.* (BUF, US).

Viola sagittata Aiton var. *ovata* (Nutt.) Torr. & A. Gray—[**syn: Viola ovata Nutt.**] Horseheads, between Mrs. Cranes & Latty Brook, roadside; dry stony soil, 13 May 1898, *s.n.* (BUF, US); Pickaway opposite Bohemia, in dry soil preferring woods and thickets, 21 May 1897, 1074 (ECH).

Viola sororia Willd.—[**syn: Viola palmata L. var. cucullata A. Gray**] Lowman's Swamp, low grounds, 11 May 1887, 13 (ECH).

Viola sp.—near Seeley Creek Bridge, 16 May 1895, 445d (BUF, US).

Viola striata Aiton—Big Island, 21 May 1887, *s.n.* (ECH, BH, BUF, US); near school house above Mountain House, ravine, 17 May 1896, *s.n.* (BUF, US); creek by Red School House, 16 May 1897, *s.n.* (BUF, US); low open thickets, 16 May 1897, 841 (BUF, US); Chemung River, banks, 21 May 1882, *s.n.* (BH, BUF, US); along the Chemung River, Ashland, low ground, rich woods, 28 May 1882, 841 (ECH).

Viola tricolor L.—Ashland, Fruit Homestead, 7 May 1880, *Cat. no. 224* (BUF); Ashland, Fruit Homestead, 14 Jun 1882, *Cat. no. 224* (?); A. Searles Farm, Ashland, cultivated grounds in grass, etc., Jun 1882, 876 (ECH).

Unresolved—[**syn: Viola cucullata L. var. cordata (Walt.) A. Gray**] Ashland, bank of Chemung River, 28 May 1882, *Cat. no. 214* (?); Ashland, 11 May 1879, *Cat. no. 214* (BH, BUF, US); Ashland, bank of Chemung River, 21 May 1882, *Cat. no. 214* (?).

Unresolved—[**syn: Viola scabriuscula Schwein. ex Torr. & A. Gray**] Jenkin's Woods, 9 May 1898, *s.n.* (BH, BUF, US); [Jenkin's Woods],

14 May 1896, *s.n.* (?); Jenkin's Woods, Greatsinger's Corner, fruiting 14 May 1896, 28 Apr 1896, 1046 (ECH).

Vitaceae

Parthenocissus inserta (Kerner) Fritsch—[**syn: Parthenocissus quinquefolia (L.) Planch.**] near Latty Brook Road, woods and thickets and near streams, 4 Sep 1896, 774a (ECH).

Parthenocissus quinquefolia (L.) Planch.—Elmira, along the Chemung River, 16 Jul 1896, *s.n.* (BH, BUF, ECH, US) Horseheads, near Latty Brook Road, 2 Sep 1896, *s.n.* (BUF, US); along the Chemung River, fences in rich soil and along rivers, 16 Jul 1896, 774 (ECH).

Vitis aestivalis Michx.—river below woods, upland thickets, 29 Jun 1898, 706 (ECH, BH, BUF, US); Henty Creek, thickets, 17 Jun 1894, *s.n.* (BUF, US); Horseheads, Latty Brook Hill, 22 Jun 1897, *s.n.* (BH, BUF, US).

Vitis argentifolia Munson—[**syn: Vitis australis Michx.**] Henty Creek, dry woods and banks, 18 Jun 1886, 706 (ECH).

Vitis labrusca L.—near Old Mountain House, 9 Aug 1898, 464b (BUF). *Vitis riparia* Michx.—[**syn: Vitis riparia Michx. subsp. riparia**] East Elmira; Arnot's Woods, 28 May 1887, *s.n.* (BUF); banks of the Chemung River, 15 Jun 1897, *s.n.* (?); along the Chemung River, 29 May 1887, *s.n.* (BUF); banks of streams, 15 Jun 1897, 1637 (MO).

§ *Vitis vulpina* L.—**State: T; TNC Rank G5 S2**; along the Chemung River, stream banks or near water, 28 May 1887, 464 (ECH); near 'Old Mt House,' along the Chemung River, along rocky river banks, 9 Aug 1898, 464a (ECH).

Unidentified

Harrington Island, 3 Aug 1893, 3854 (BUF, US); Chemung, 22 Aug 1882, *s.n.* (BH, BUF, US); Miller's Pond, 5 Aug 1897, *s.n.* (BUF, US); Lowman's Swamp, 22 Sep 1897, *s.n.* (BH, BUF, US); no location, no date, *s.n.* (BUF).

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