# BOOK NOTICES

Boris Rozin. 2020. **Double Helix of Phyllotaxis: Analysis of the Geometric Model of Plant Morphogenesis.** (ISBN-13: 978-1-62734-748-8, pbk). Brown Walker Press/Universal Publishers, Inc., 200 Spectrum Center Drive #300, Irvine, California 92618-5004, U.S.A. (**Orders:** www.BrownWalkerPress.com). $39.95 US, 186 pp., color figures throughout, appendices, references, index, 6" × 9".

***From the Publisher:*** This book is devoted to anyone who is in search of beauty in mathematics, and mathematics in the beauty around us. Attempting to combine mathematical rigor and magnificence of the visual perception, the author is presenting the mathematical study of phyllotaxis, the most beautiful phenomenon of the living nature. The distinctive feature of this book is an animation feature that explains the work of mathematical models and the transformation of 3D space.

The analysis of the phyllotactic pattern as a system of discrete objects together with the mathematical tools of generalized sequences made it possible to find a universal algorithm for calculating the divergence angle. In addition, it is serving as a new proof of the fundamental theorem of phyllotaxis and analytically confirming well-known formulas obtained intuitively earlier as well as casting some doubts on a few stereotypes existing in mathematical phyllotaxis.

The presentation of phyllotaxis morphogenesis as a recursive process allowed the author to formulate the hydraulic model of phyllotaxis morphogenesis and propose a method for its experimental verification. With the help of artificial intelligence, the author offered methodology for the digital measurement of phyllotaxis allowing a transition to a qualitatively new level in the study of plant morphogenesis. Due to the successful combination of mathematical constructions and their visual presentation, the materials of this study are comprehensible to readers with high school advanced mathematical levels.

***About the Author:*** Boris Rozin was born in Kiev, Ukraine. In 1981, he graduated from the math and physics High School #145 in Kiev and could not enter the top universities in Moscow and Kiev due to governmental anti-Semitism in the USSR. In 1989, he graduated with an Honors degree from the National Vinnitsa Technical University in Ukraine with a master's degree in Computer Science and Engineering. Immediately after graduation, he started working as a full-time assistant professor at the Department of Applied Mathematics and Computer Science of the National Vinnitsa Technical University. He taught: Applied Theory of Digital Devices, mathematical Modeling, Discrete Mathematics and Graph Theory. Along with teaching, he studied in the PhD program, but due to anti-Semitism, the university administration put obstacles in the way of getting the degree.YouTube channel Double Helix of Phyllotaxis.

David W. Hall. 2020. **Illustrated Plants of Florida and the Coastal Plain, Second Edition.** (ISBN-13: 9780813066561, hbk). University Press of Florida, 2046 NE Waldo Road, Suite 2100, Gainesville, Florida 32609, U.S.A. (**Orders:** upress.ufl.edu). $85.00 US, 536 pp., illustrations throughout, references, index, 7" × 10".

***From the Publisher:*** This extensively illustrated volume is an indispensable identification guide to nearly 1,400 species of plants, both common and rare, found in Florida and neighboring coastal states. It contains frequently occurring wildflowers, shrubs, and herbaceous plants from the region, and includes select grasses, rushes, and trees.

For each species, the book features a carefully rendered illustration, the plant's vernacular and scientific names along with synonyms that have been used to refer to it, and a short description that includes the plant's habitat, range, frequency, flowering times, and origin. Reflecting recent changes in classification by using the most current names and taxonomies, this second edition arranges plant families according to their relationship with each other in a user-friendly system. It is also updated with over 200 new illustrations.

The book is an ideal resource for both experienced gardeners and beginners, and its images can serve as a useful supplement to text-based references for professionals. As home landscapers and horticulture experts turn their attention to the benefits of cultivating native plants, this book provides vital information on the sources of species Florida residents might encounter, helping readers navigate the diverse and continually increasing flora of the state.

Jono Miller. 2021. **The Palmetto Book.** (ISBN-13: 978-0-8130-6680-6, hbk). University Press of Florida, 2046 NE Waldo Road, Suite 2100, Gainesville, Florida 32609, U.S.A. (**Orders:** upress.ufl.edu). $28.00 US, 312 pp., black and white photos, notes, index, 6¼" × 9 ½".

**From the Publisher:** The palmetto, also known as the cabbage palm or Sabal palmetto, is an iconic part of the southeastern American landscape and the state tree of Florida and South Carolina. In *The Palmetto Book*, Jono Miller offers surprising facts and dispels common myths about an important native plant that remains largely misunderstood.