Plant Families: A Guide for Gardeners and Botanists. By Ross Bayton and Simon Maughan. 2017. University of Chicago Press. (ISBN: 9780226523088) 224 pp. Hardcover, $25.

Even before opening the covers, any science book lover will appreciate the appeal and quality of Plant Families. Great attention has been paid
to the details of presentation; in particular, the volume unites art with science throughout. Each page is carefully laid out with text and elegant historical illustrations depicting the topic under discussion. Drawings of details and line diagrams are frequently used to more clearly examine details of structure and process.

As is to be expected for a guide book, Plant Families is beautifully organized. The introduction provides brief discussions of the current plant families, representing plant evolutionary trends from the earliest mosses and liverworts to the more complex and later-evolved angiosperms. Similarly, the explanation of the distinction between monocots and eudicots helps the reader understand the differences between these two major plant groupings. The introduction also provides a very helpful overview of what to look for when identifying plants, including growth cycle, location, anatomical features such as leaf placement and shape, flower type, and characteristics of fruits and seeds. Lastly, an extensive dichotomous key walks the reader through the process of identifying the family of a plant sample. Following this is the true focus of the book: presentation of the plant families themselves. Two to four pages for each family provide information about size, range, origin, flowers, fruits, leaves, and uses. The authors make note of invasive species and the care gardeners must take in planting decisions to limit their spread.

Although written with gardeners in mind (the “Uses for This Family” sections primarily give tips for purchase and planting in different types of gardens) there are many aspects of this little volume to interest the biology teacher and student. The introduction’s dichotomous key could easily be the basis of a fun and informative plant identification activity. The worldwide scope of this guide makes it a fascinating overview of plants and plant adaptations, although this also makes it less useful in specific North American plant identifications. Scattered throughout are gems of biological information – for example, the flowering spadix of the arum family sometimes heats up to spread pollinator-attracting odors more widely. Different water absorption adaptations among the bromeliads include roots in pineapples and desert bromeliads, water-absorbing leaf scales in air plants, and water-collecting urns in rainforest epiphytes. Legumes and their symbiotic bacteria are critical in nitrogen fixation. Fig receptacles have tiny internal flowers that are fertilized by a specific female wasp. The dried firm wall of Luffa cylindrica, a member of the cucumber family, is the source of the loofah sponge. Oak and beech trees produce intermittent bumper crops of nuts called “mast,” designed to overwhelm seed predators and ensure that some seeds survive to germination. These and many other fascinating tidbits of information await the Plant Families reader.

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Call for Nominations

The Nominating Committee is looking for your recommendations for NABT’s next leaders.

Open positions for the 2020 election are listed below. Candidates for president-elect alternate between the pre-college, two-year college and four-year college/university communities and nominations from the K-12 level are sought for president in this election.

Candidates for NABT Office should have: (1) evidence of active participation in NABT such as previous service as an elected officer, committee chairperson or member, section or affiliate leader, etc. (2) at least five years of continuous membership in NABT; and (3) five years experience teaching biology, life science, or science education.

Nominate yourself!
Who else knows your interests and qualifications as well as you do?

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Nominations accepted online at https://www.nabt.org/About-Leadership-Opportunities

Nominations are due March 15