

CANOTIA VOLUME 20

The Genus *Psidium* (Myrtaceae) in the Greater Antilles

Leslie R. Landrum, Zenia Acosta Ramos, Francisco Jiménez-Rodríguez,
Keron C. St. E. Campbell 1

Vascular Plants of Arizona. Potamogetonaceae

Jon M. Ricketson 56

Publication announcement: *Legumes of Arizona – an Illustrated Flora and Reference*

Michelle M. McMahon..... 73



November 2024
Vascular Plant Herbarium
Natural History Collections
School of Life Sciences
Arizona State University

CANOTIA

Editor: Leslie R. Landrum
(les.landrum@asu.edu)

Webmaster: Edward Gilbert
(egbot@asu.edu)

P. O. Box 874108
Natural History Collections
School of Life Sciences
Arizona State University
Tempe, AZ 85287-4108

Printed copies of this issue are being supported in part through a grant from the Arizona Native Plant Society. An introduction to the Vascular Plants of Arizona project can be found in Canotia volume 1, issue 1.

Canotia publishes botanical and mycological papers related to Arizona, or in the case of this issue, research papers by Arizona botanists. These may include contributions to the Vascular Plants of Arizona project, checklists, local floras, new records for Arizona, and ecological studies. All manuscripts are peer-reviewed by specialists. Acceptance for publication will be at the discretion of the editor. At least 30 printed copies of each issue are distributed to libraries in the United States, Europe, and Latin America. Anyone may download copies free of charge at <https://canotia.org/>.

Canotia is named for *Canotia holacantha* Torr. (Celastraceae), a spiny shrub or small tree nearly endemic to Arizona. Cover illustration by Alandon Joe.

ISSN 1931-3616

INDEX TO FAMILIES OF THE VASCULAR PLANTS OF ARIZONA

Published treatments (**in bold**) can be found in volumes 26, 27, 29, 30, 32, 33, and 35 of the *Journal of the Arizona-Nevada Academy of Science* (JANAS) or in subsequent volumes (1–20) of **CANOTIA**. Unbolded entries indicate families with no treatments published to date. Figure numbers refer to illustrations in the “Key to Families of Vascular Plants in Arizona” in JANAS 35(2). All Vascular Plants of Arizona treatments are available as pdf files online at (https://canotia.org/vpa_project.php).

- Acanthaceae** CANOTIA 12:22-54. 2016. (T. Daniel)
Aceraceae JANAS 29(1):2. 1995. (L. R. Landrum)
 Adiantaceae (Fig. 1)
Agavaceae Part 1: *Agave* JANAS 32(1):1. 1999. (W. Hodgson)
Agavaceae Part 2: *Hesperoyucca* CANOTIA 18:182.
 Aizoaceae
Alismataceae CANOTIA 14:10. 2018 (J. Ricketson)
 Amaranthaceae (Fig. 4)
Anacardiaceae CANOTIA 3(2):13. 2007. (J. L. Anderson)
 Apiaceae (Fig. 5)
Apocynaceae JANAS 27(2):164. 1994. (S. P. McLaughlin)
 Araceae
 Araliaceae
Arecaceae JANAS 32(1):22. 1999. (C. T. Mason, Jr.)
Aristolochiaceae JANAS 32(1):24. 1999. (C. T. Mason, Jr.)
Asclepiadaceae JANAS 27(2):169. 1994. (E. Sundell)
 Aspleniaceae
 Asteraceae (Figs. 6–7)
Azollaceae CANOTIA 4(2):31. 2008. (G. Yatskievych and M.D. Windham)
Berberidaceae JANAS 26(1):2. 1992. (J. E. LaFerriere; Fig. 9)
Betulaceae JANAS 33(1):1. 2001. (J. W. Brasher)
Bignoniaceae JANAS 32(1):26. 1999. (C. T. Mason, Jr.)
Bixaceae JANAS 27(2):188. 1994. (W. Hodgson)
Blechnaceae CANOTIA 4(2):35. 2008. (G. Yatskievych and M.D. Windham; Fig. 1)
 Boraginaceae (Fig. 9)
 Brassicaceae
Bromeliaceae CANOTIA 3(2):23. 2007. (R. Gutierrez, Jr.)
Buddlejaceae JANAS 26(1):5. 1992. (E. M. Norman)
Burseraceae JANAS 32(1):29. 1999. (A. Salywon)
Cactaceae Part One: The Cereoid Cacti JANAS 29(1):6. 1995. (D. J. Pinkava)
Cactaceae Part Two: *Echinocactus* JANAS 29(1):13. 1995. (M. Chamberland)
Cactaceae Part Three: *Cylindropuntia* JANAS 32(1):32. 1999. (D. J. Pinkava)
Cactaceae Part Four: *Grusonia* JANAS 32(1):48. 1999. (D. J. Pinkava)
Cactaceae Part Five: *Pediocactus* and *Sclerocactus* JANAS 33(1):9. 2001. (K. D. Heil and J. M. Porter)
Cactaceae Part Six: *Opuntia* JANAS 35(2):137. 2003. (D. J. Pinkava)
Callitrichaceae JANAS 29(1):15. 1995. (J. Ricketson)
 Campanulaceae
Cannabaceae JANAS 32(1):53. 1999. (C. T. Mason, Jr.)
 Capparaceae (Fig. 8)
 Caprifoliaceae (Fig. 10)
 Caryophyllaceae (Fig. 10)
Celastraceae JANAS 30(2):57. 1998. (J. W. Brasher)
Ceratophyllaceae JANAS 29(1):17. 1995. (J. Ricketson)
 Chenopodiaceae (Fig. 9)
 Clusiaceae
Commelinaceae JANAS 33(1):19. 2001. (R. Puente and R. Faden)
Convolvulaceae JANAS 30(2):61. 1998. (D. F. Austin)
Cornaceae CANOTIA 15:1. 2019. (R. Gutierrez)
Crassulaceae JANAS 27(2):190. 1994. (R. Moran)
Crossosomataceae JANAS 26(1):7. 1992. (C. Mason)
Cucurbitaceae CANOTIA 12:55-85. 2016. (M. Butterwick)
Cupressaceae JANAS 27(2):195. 1994. (J. Bartel)
 Cuscutaceae
Cyperaceae Part One: Key to the Genera and *Carex*. CANOTIA 11(1):1. 2015. (G. Rink and M. Licher)
Dennstaedtiaceae CANOTIA 4(2):38. 2008. (G. Yatskievych and M. D. Windham; Fig. 1)
Dipsaceae JANAS 27(2):201. 1994. (J. E. LaFerriere)
 Dryopteridaceae (Fig. 1)
 Elaeagnaceae
 Elatinaceae
 Ephedraceae (Fig. 2)
Ericaceae CANOTIA 4(2):21. 2008. (J. L. Anderson; Fig. 11)
Euphorbiaceae Part One: *Acalypha* and *Cnidoscolus* JANAS 29(1):18. 1995. (G. A. Levin)
Equisetaceae CANOTIA 4(2):41. 2008. (G. Yatskievych and M. D. Windham)
Fabaceae, whole family: See separately published book, *Legumes of Arizona: An Illustrated Flora and Reference*. 2024. (M. M. McMahon, M. B. Johnson, K. N. Lake, M. F. Wojciechowski, and M. W. Bierner) <https://shopbritpress.org/products/legumes-of-arizona>
Fabaceae Part One: *Errazuria*, *Marina*, *Parryella*, and *Psoralea* CANOTIA 7:1. 2011 (S. Rhodes, J. Beasley, and T. Ayers; Figs. 12–13)
Fagaceae JANAS 27(2):203. 1994. (L. R. Landrum)
Fouquieriaceae JANAS 32(1):55. 1999. (C. T. Mason, Jr.)
Fumariaceae JANAS 33(1):27. 2001. (S. Holiday and A. Perez)
Garryaceae JANAS 33(1):31. 2001. (R. Puente and T. F. Daniel)
Gentianaceae JANAS 30(2):84. 1998. (C. T. Mason, Jr.)
 Geraniaceae (Fig. 14)
 Grossulariaceae
 Haloragaceae
Hippuridaceae JANAS 29(1):25. 1995. (J. Ricketson)
Hydrangeaceae CANOTIA 15:14. 2019. (W. McBride, A. Prince, S. Holiday, T. Ridlinghafer, S. Skibicki, R. Scott, and T. Ayers)
Hydrocharitaceae CANOTIA 14: 22. 2018 (J. Ricketson)
 Hydrophyllaceae (Fig. 14)
Iridaceae Part One: *Sisyrinchium* JANAS 27(2):215. 1994. (A. F. Cholewa and D. M. Henderson)
Iridaceae Part Two: *Iris* and *Nemastylis* JANAS 33(1):35. 2001. (C. T. Mason, Jr.)
Isoëtaceae CANOTIA 5(1):27. 2009. (G. Yatskievych and M. D. Windham)
Juglandaceae JANAS 27(2):219. 1994. (J.E. LaFerriere)
Juncaceae CANOTIA 15: 2019. (M. Licher and G. Rink)
 Juncaginaceae
 Key to Families of Vascular Plants in Arizona JANAS 35(2):88. 2003. (D. J. Keil)
Krameriaceae JANAS 32(1):57. 1999. (B. B. Simpson and A. Salywon)
Lamiaceae Part One: *Agastache*, *Hyptis*, *Lamium*, *Leonurus*, *Marrubium*, *Monarda*, *Monardella*, *Nepeta*, *Salazaria*, *Stachys*, *Teucrium*, and

- Trichostema* JANAS 35(2):151. 2003. (C. M. Christy, D. Z. Damrel, A. Henry, A. Trauth- Nare, R. Puente-Martinez, and G. Walters)
- Lemnaceae JANAS 26(1):10. 1992. (E. Landolt)
- Lennoaceae JANAS 27(2):220. 1994. (G. Yatskievych)
- Lentibulariaceae CANOTIA 8(2):54-58. 2012. (B. Rice)
- Liliaceae (Fig. 19)
- Linaceae
- Loasaceae JANAS 30(2):96. 1998. (C. M. Christy)
- Lythraceae
- Malpighiaceae
- Malvaceae Part One: All genera except *Sphaeralcea*. JANAS 27(2):222. 1994. (P. A. Fryxell)
- Marsileaceae CANOTIA 5(1):30. 2009. (G. Yatskievych and M.D. Windham)
- Martyniaceae CANOTIA 3(2):26. 2007. (R. Gutierrez, Jr.)
- Meliaceae
- Menispermaceae JANAS 27(2):237. 1994. (J. E. LaFerriere)
- Menyanthaceae JANAS 33(1):38. 2001. (C. T. Mason, Jr.)
- Monotropaceae JANAS 26(1):15. 1992. (E. Haber)
- Molluginaceae JANAS 30(2):112. 1998. (C. M. Christy)
- Moraceae
- Najadaceae CANOTIA 14:30. 2018 (J. Ricketson)
- Nyctaginaceae (Fig. 14)
- Nymphaeaceae JANAS 29(1):26. 1995. (J. Ricketson)
- Oleaceae (Fig. 15)
- Onagraceae (Fig. 15)
- Ophioglossaceae
- Orchidaceae
- Orobanchaceae
- Oxalidaceae JANAS 30(2):115. 1998. (R. Ornduff and M. Denton)
- Papaveraceae JANAS 30(2):120. 1998. (G. B. Ownbey with contributions by J.W. Brasher and C. Clark)
- Passifloraceae JANAS 33(1):41. 2001. (J. M. MacDougal)
- Phrymaceae CANOTIA 12:1-21. 2016. (K. Hansen, E. Johnson, K. O. Phillips, J. Talboom and T. Ayers)
- Phytolaccaceae JANAS 33(1):46. 2001. (V. Steinmann)
- Pinaceae
- Plantaginaceae: *Plantago*. JANAS 32(1):62. 1999. (K. D. Huisinga and T.J. Ayers)
- Plantaginaceae: Family description, Key to Genera, and *Penstemon*. CANOTIA 19: 65. 2023. (G. R. Rink)
- Platanaceae JANAS 27(2):238. 1994. (J. E. LaFerriere)
- Plumbaginaceae
- Poaceae (Fig. 20)
- Polemoniaceae CANOTIA 1:1. 2005. (D. Wilken and M. Porter)
- Polygalaceae
- Polygonaceae (Fig. 15)
- Polypodiaceae CANOTIA 5(1):34. 2009. (G. Yatskievych and M. D. Windham; Fig. 1)
- Pontederiaceae JANAS 30(2):133. 1998. (C.N. Horn)
- Portulacaceae CANOTIA 2(1):1. 2006. (A. Bair, M. Howe, D. Roth, R. Taylor, T. Ayers, and R.W. Kiger)
- Potamogetonaceae CANOTIA 20: 56–72. 2024. (J. Ricketson)
- Primulaceae JANAS 26(1):17. 1992. (A.F. Cholewa; Fig. 16)
- Psilotaceae CANOTIA 3(2):32. 2007. (R. Gutierrez, Jr.)
- Pyrolaceae JANAS 26(1):22. 1992. (E. Haber)
- Rafflesiaceae JANAS 27(2):239. 1994. (G. Yatskievych)
- Ranunculaceae (Fig.15)
- Resedaceae CANOTIA 14:35. 2018 (R.Gutierrez)
- Rhamnaceae CANOTIA 2(1):23. 2006. (K. Christie, M. Currie, L. Smith Davis, M-E. Hill, S. Neal, and T. Ayers)
- Rosaceae Part One: *Rubus*. JANAS 33(1):50. 2001. (J. W. Brasher)
- Rubiaceae JANAS 29(1):29. 1995. (L. Dempster and E. T. Terrell; Fig. 16)
- Ruppiaceae CANOTIA 14:38. 2018 (J. Ricketson)
- Rutaceae
- Salicaceae Part One: *Populus*. JANAS 26(1):29. 1992. (J. E. Eckenwalder)
- Salicaceae Part Two: *Salix*. JANAS 29(1):39. 1995. (G. W. Argus)
- Salviniaceae CANOTIA 4(2):50. 2008. (G. Yatskievych and M. D. Windham)
- Santalaceae JANAS 27(2):240. 1994. (J. E. LaFerriere)
- Sapindaceae JANAS 32(1):76. 1999. (A. Salywon)
- Sapotaceae JANAS 26(1):34. 1992. (L. R. Landrum)
- Saururaceae JANAS 32(1):83. 1999. (C. T. Mason, Jr.)
- Saxifragaceae JANAS 26(1):36. 1992. (P. Elvander; Fig. 16)
- Scrophulariaceae CANOTIA 14:41. 2018 (R.Crawford, K. Noonan, and T. Ayers) (see also Phrymaceae)
- Selaginellaceae CANOTIA 5(1):39. 2009. (G. Yatskievych and M. D. Windham)
- Simaroubaceae JANAS 32(1):85. 1999. (J. W. Brasher)
- Simmondsiaceae JANAS 29(1):63. 1995. (J. Rebman)
- Solanaceae Part One: *Datura*. JANAS 33(1):58. 2001. (R. Bye)
- Solanaceae Part Two: Key to the Genera and *Solanum*. CANOTIA 5(1):1. 2009. (S. T. Bates, F. Farruggia, E. Gilbert R. Gutierrez, D. Jenke, E. Makings, E. Manton, D. Newton, and L. R. Landrum)
- Solanaceae Part Three: *Lycium*. CANOTIA 5(1):17. 2009. (F. Chiang and L. R. Landrum)
- Solanaceae Part Four: *Physalis* and *Quincula*. CANOTIA 9:1. 2013. (L. R. Landrum, A. Barber, K. Barron, F. S. Coburn, K. Sanderford, and D. Setaro)
- Solanaceae Part Five: *Chamaesaracha*. CANOTIA 9:13. 2013. (E. Manton)
- Solanaceae Part Six: Nicotiana. CANOTIA 14:54. 2018. (E. Makings and J. P.Solves)
- Solanaceae Part Seven: *Browallia*, *Calibrachoa*, *Capsicum*, *Jaltomata* and *Salpichroa*. CANOTIA 17: 46. 2021. (C. M. Currier, E. Makings, J. Anderson, J. Maranville, and Kariah Slagel)
- Sparganiaceae JANAS 33(1):65. 2001. (J. Ricketson)
- Sterculiaceae
- Tamaricaceae
- Thelypteridaceae CANOTIA 5(1):49. 2009. (G. Yatskievych and M. D. Windham)
- Tiliaceae
- Typhaceae JANAS 33(1):69. 2001. (J. Ricketson)
- Ulmaceae JANAS 35(2):170. 2003. (J. W. Brasher)
- Urticaceae JANAS 26(1):42. 1992. (D. Boufford)
- Valerianaceae
- Verbenaceae
- Violaceae. JANAS 33(1):73. 2001. (R. J. Little; Fig. 17)
- Viscaceae JANAS 27(2):241. 1994. (F.G. Hawksworth and D. Wiens)
- Vitaceae
- Zannichelliaceae CANOTIA 14:63. (J. Ricketson)
- Zygophyllaceae (Fig. 17)