



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

Referencias bibliográficas

- Agren, J. & Schemske, D.W. 1991. Pollination by deceit in a neotropical monoecious herb, *Begonia involucrata*. *Biotropica* 23: 235-241.
- Andrews, H.C. 1811. *Begonia evansiana*. *Botanist's Repository* 10: pi. 627.
- Arends, J.C. 1985. Karyology of African *Begonias*. *Acta Botanica Neerlandica* 34: 230.
- Arends, J.C. 1992. Biosystematics of *Begonia squamulosa* Hook.f. and affiliated species in the section *Tetraphila* A.DC. Agricultural University Wageningen, The Netherlands.
- Barabé D, Brouillet L, Bertrand C. 1991. Symétrie et phyllotaxie: le cas des Bégonias. *Annales des Sciences Naturelles Botanique Paris*, 13ième série. 11: 33-37.
- Barabe, D., Brouillet, L. & Bertrand, C. 1992. Organogénie de la feuille du *Begonia radicans* Vellozo et du *Begonia scabrida* A.D.C (Begoniaceae). *Canadian Journal of Botany* 70: 1107-1122.
- Barabe, D., Daigle, S. & Brouillet, L. 1992. On the interpretation of the asymmetrical leaf of *Begonia* by D'arcy Thompson. *Acta Biotheoretica* 40: 329-332.
- Baranov, A.I. 1977. Preliminary notes on the structure of stigmatic surfaces in the Begoniaceae. *Rhodora* 79: 283-287.
- Baranov, A.I. & Barkley, F.A. 1972. Some nomenclatural changes in the sections of *Begonia* L. *Phytologia* 24: 155-157.
- Baranov, A.I. & Barkley, F.A. 1974. The sections of the genus *Begonia*. Northeastern University, Boston.
- Barkley, F.A. & Baranov, A.I. 1972. The Sections of the Begoniaceae. *Buxtonian* 1: 1-8
- Barkley, F.A. & Golding, J. 1972. The species of the Begoniaceae. 1st Edn. Northeastern University, Boston.
- Barkley, F.A. & Golding, J. 1974. The species of the Begoniaceae. 2da. edn. Northeastern University, Boston.
- Bentham, G. & Hooker, J.D. 1867. Begoniaceae. In G. Bentham & J.D. Hooker (eds.) *Genera Plantarum* 841-844. Reeve & Co., London.
- Bouman, F. & de Lange, A. 1983. Structure, micromorphology of *Begonia* seeds. *Begonian* 50: 70-78, 91.
- Brown, R. 1813. *Begonia discolor*. In *Hortus Kewensis* (Aiton, ed.): 284, London.
- Burt-Utley, K. 1983. Three new species of *Begonia* (Begoniaceae) from Mexico. *Brittonia* 35: 115-119



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

Burt-Utley, K. 1984. Studies on Middle American *Begonia* (Begoniaceae) I. *Brittonia* 36: 232–235.

Burt Utley, K. 1985. A revision of Central American species of *Begonia* section *Gireoudia* (Begoniaceae). *Tulane Studies in Zoology and Botany* 25: 1–131.

Burt-Utley, K. 1986. Studies on Middle American *Begonia* (Begoniaceae) II. *Brittonia* 38: 333–339.

Burt-Utley K. 1990. New and noteworthy species in *Begonia* section *Gireoudia* (Begoniaceae) from Mexico. *Brittonia* 42: 38–46.

Burt-Utley, K. 2001. Begoniaceae. In W.D. Stevens, C. Ulloa, A. Pool & O.M. Montiel (eds.), *Flora de Nicaragua Volumen I. Monographs in Systematic Botany from the Missouri Botanical Garden* 85: 397–402.

Burt -Utley, K. 2015. Begoniaceae. In G. Davidse, M. Sousa Sánchez, Knapp, S. & F. Chiang Cabrera (eds.), *Flora Mesoamericana. Volumen II, part 3*, pp. v–xvii, 1–347. St. Louis, Missouri: Missouri Botanical Garden.

Burt-Utley, K. & McVaugh, R. 2001. Begoniaceae. Pp. 653–695 in R. McVaugh & W. R. Anderson (eds.), *Flora Novo-Galiciana, Vol. 3: Ochnaceae to Loasaceae*. University of Michigan Press, Ann Arbor.

Burt-Utley, K. & Utley, J.F. 1999. Contributions toward a revision of *Begonia* section *Weilbachia* (Begoniaceae). *Novon* 9(4): 483–489.

Burt-Utley, K. & Utley, J.F. 2011. New species and notes on *Begonia* (Begoniaceae) from Middle America, I. *Novon* 21(4): 393–401.

Burt-Utley, K. & Utley, J.F. 2012. New species and notes on *Begonia* (Begoniaceae) from México and Central America. *Phytoneuron* 74: 1–25.

Burt-Utley, K. & Utley, J.F. 2014. New species of *Begonia* (Begoniaceae) from Mexico and Central America. *Phytoneuron* 2014-37: 1–8.

Carlquist, S. 1985. Wood anatomy of Begoniaceae, with comments on raylessness, pedomorphosis, relationships, vessel diameter, and ecology. *Bulletin of the Torrey Botanical Club* 112: 59–69.

Charlton, W.A. 1993. The rotated-lamina syndrome. III. Cases in *Begonia*, *Corylus*, *Magnolia*, *Pellionia*, *Prunus*, and *Tilia*. *Canadian Journal of Botany* 71: 229–247.

Charpentier, A., Brouillet, L. & Barabe, D. 1989a. Organogenese de la fleur pistillee du *Begonia horticola* (Begoniaceae). *Canadian Journal of Botany* 67: 559–572.

Charpentier, A., Brouillet, L. & Barabe, D. 1989b. Organogenese de la fleur pistillee du *Begonia dregei* et de l'*Hillebrandia sandwicensis* (Begoniaceae). *Canadian Journal of Botany* 67: 3625–3639.



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

Chávez-García, E. & Vázquez-Santana, S. 2012. Morfología floral y embriología de *Begonia gracilis* (Begoniaceae): su relevancia en la monoecia. *Botanical Sciences* 90 (4): 367-380.

Chun, W.Y. & Chun, F. 1939. Notes on *Begonia*. *Sunyatsenia* 4: 23-25.

Clarke, C.B. 1879. Begoniaceae. In J.D. Hooker (ed.), *Flora of British India*: 635-656. L. Reeve & Co., London.

Clarke, C.B. 1881. On Indian *Begonias*. *Journal of the Linnean Society, Botany* 18: 114-122.

de Candolle A. 1859. Mémoire sur la famille des Bégoniacées. *Annales des Sciences naturelles; Botanique Série 4*, 11: 116-145.

de Candolle, A. 1864. Begoniaceae. *Prodromus Systematis Naturalis Regni Vegetabilis* 15 (1): 266-408.

de Lange, A. & Bouman, F. 1999. Seed micromorphology of neotropical begonias. *Smithsonian Contributions to Botany* 90: 1-49.

Dewitte, A., Twyford, A.D., Thomas, D.C., Kidner, C.A. & van Huylbroeck, J. 2011. The origin of diversity in *Begonia*: Genome dynamism, population processes and phylogenetic patterns. Pp. 27-52 In O. Grillo & G. Venora (eds.), *The Dynamical Processes of Biodiversity. Case Studies of Evolution and Spatial Distribution*. IntechOpen, London.

Doorenbos, J.M, Sosef, M.S.M. & De Wilde, J.J.F.E. 1998. The sections of *Begonia* including descriptions, keys and species lists. *Studies in Begoniaceae VI*. Wageningen Agricultural University Papers 98 (2): 1-266.

Dorr, L.J. 1999. Notes on *Begonia* (Begoniaceae) in the Venezuelan Andes. *Harvard Papers in Botany* 4: 253-264.

Forrest, L.L. & Hollingsworth, P.M. 2003. A recircumscription of *Begonia* based on nuclear ribosomal sequences. *Plant Systematic and Evolution* 241: 193-211.

Forrest, L.L., Hughes, M. & Hollingsworth, P.M. 2005. A phylogeny of *Begonia* using nuclear ribosomal sequence data and morphological characters. *Systematic Botany* 30(3): 671-682.

Golding, J. & Wasshausen, D.C. 2002. Begoniaceae, edition 2. Part I: Annotated species list. Part II: Illustrated key, abridgement and supplement. *Contributions from the United States National Herbarium* 43: 1-289.

Goodall-Copestake, W.P, Pérez-Espona, S., Harris, D.J. & Hollingsworth, P.M. 2010. The early evolution of the mega-diverse genus *Begonia* (Begoniaceae) inferred from organelle DNA phylogenies. *Botanical Journal of the Linnean Society* 101(1): 243-250.

Gregório B.S. 2014. Flora da Bahia: Begoniaceae. M.Sc. Thesis, Universidade Estadual de Feira de Santana, Brazil.



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

Gregório, B.S., Jacques, E.L., Costa, J.A.S. & Rapini, A. 2014. *Begonia obdeltata* (Begoniaceae), a new species from northeast Brazil. *Phytotaxa* 167(2): 189–194.

Hoover, W.S. 1986. Stomata and stomatal clusters in *Begonia*: ecological response in two Mexican species. *Biotropica* 18: 16-21.

Houghton, A.D. 1924. A monograph of the Begoniaceae of North America. Tesis de doctorado inéd., Univ. California, Berkeley, CA, EUA.

Hughes, M. & Hollingsworth, P.M. 2008. Population genetic divergence corresponds with species-level biodiversity patterns in the large genus *Begonia*. *Molecular Ecology*. 17: 2643–2651.

Irmscher E. 1925. Begoniaceae. Die natürlichen Pflanderfamilien. Leipzig: Wilhem Engelmann, 548–588.

Irmscher, E. 1949. Beiträge zur Kenntnis der Begoniaceen Südamerikas. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 74 (4): 569–632.

Jacques E.L. 2002. Estudos taxonômicos das espécies brasileiras do gênero *Begonia* L. (Begoniaceae) com placenta partida. Ph.D. Thesis, Universidade de São Paulo, Brazil.

Jacques E.L., Venda A.K.L., Judice, D.M., Abreu, M.B., Sfair, J.C. & Messina, T. 2013. Begoniaceae. In G. Martinelli, M.A. Moraes (eds.) *Livro Vermelho da Flora do Brasil*. Andrea Jakobsson: Instituto de Pesquisas Jardim Botânico do Rio de Janeiro, Rio de Janeiro, 287–300.

Jara-Muñoz, O.A. 2017. Sistemática y Biogeografía de las Secciones *Casparya* y *Semibegoniella* (*Begonia* L.). Tesis de Doctorado, Universidad de los Andes, Bogotá.

Jara-Muñoz, O.A., Richardson, J.E. & Madriñán, S. 2017. A new species of *Begonia* section *Casparya* from the Colombian Eastern Cordillera and a key to the Colombian *Casparya*. *Phytotaxa* 321: 208–2012.

Jiménez, R. & Schubert, B.G. 1997. Begoniaceae. *Flora de Veracruz* 100: 1-72.

Legro, R.A.H. & Doorenbos, J. 1969. Chromosome numbers in *Begonia*. *Netherlands Journal of Agricultural Science* 17: 189-202.

Klotzsch, J.F. 1854. Begoniaceen. Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlich Preuss. Akademie der Wissenschaften zu Berlin 1854: 119–128.

Marin, G.E.C. 2006. Contribuciones al conocimiento micromorfológico de semillas de algunas especies paraguayas del género *Begonia* (Begoniaceae). *Rojasiana* 7 (2): 35-50.

Matolweni, L.O., Balkwill, K. & McLellan, T. 2000. Genetic diversity and gene flow in the morphologically variable, rare endemic *Begonia dregei* and *Begonia homonyma* (Begoniaceae). *American Journal of Botany* 87: 431–439.



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

McMillan, P.D., Wyatt, G. & Morris, R. 2006. The *Begonia* of Veracruz: additions and revisions. *Acta Botánica Mexicana* 75: 77–99.

Moonlight, P.W., Hughes, M. & Tebbitt, M.C. 2017. Taxonomy of *Begonia albomaculata* and description of two new species endemic to Peru. *Edinburgh Journal of Botany* 74(2).

Moonlight, P.W., Reynel, C. & Tebbitt, M.C. 2017. *Begonia elachista* Moonlight & Tebbitt sp. nov., an enigmatic new species and a new section of *Begonia* (Begoniaceae) from Peru. *European Journal of Taxonomy* 281: 1–13

Moonlight, P.W. & Tebbitt, M.C. 2017. Two new Peruvian species of *Begonia* (Begoniaceae) and an amended description of *Begonia thyrsoides*. *Edinburgh Journal of Botany* 74(2): 111–122.

Moonlight, P.W., Ardi, W.H., Arroyo Padilla, L., Chung, K.-F., Fuller, D., Girmansyah, D., Hollands, R., Jara-Muñoz, A., Kiew, R., Leong, W.-C., Liu, Y., Mahardika, A., Marasinghe, L.D.K., O'Connor, M., Peng, C.-I., Pérez, A.J., Phutthai, T., Pullan, M., Rajbhandary, S., Reynel, C., Rubite, R.R., Sang, J., Scherberich, D., Shui, Y.-M., Tebbitt, M.C., Thomas, D.C., Wilson, H.P., Zaini, N.H. & Hughes, M. 2018. Dividing and conquering the fastest-growing genus: Towards a natural sectional classification of the mega-diverse genus *Begonia* (Begoniaceae). *Taxon* 67 (2): 267–323.

Neale, S., Goodall-Copestake W. & Kidner C.A. 2006. The evolution of diversity in *Begonia*. In J.A. Teixeira da Silva (ed.) *Floriculture, Ornamental and Plant Biotechnology*. Global Science Books, London, 606–611.

Rajbhandary, S. 2013. Traditional uses of *Begonia* species (Begoniaceae) in Nepal. *Journal of Natural History Museum* 27: 25–34.

Rodríguez, A. & Estrada, A. 2020. Begoniaceae. In B.E. Hammel, M.H. Grayum, C. Herrera, & N. Zamora (eds.), *Manual de Plantas de Costa Rica. Volumen IV, parte 2: Dicotiledóneas (Balanophoraceae-Clethraceae)*. *Monographs in Systematic Botany from the Missouri Botanical* 138: 13–51.

Rolfe, R.A. 1914. *Begonia lophoptera*. *Bulletin of Miscellaneous Information, Royal Gardens, Kew* 1914(1): 28.

Schemske, D.W. & Agren, J. 1995. Deceit pollination and selection on female flower size in *Begonia involucreta*: an experimental approach. *Evolution* 49: 207–214.

Shui, Y.M., Peng, C.I. & Wu, C.Y. 2002. Synopsis of the Chinese species of *Begonia* (Begoniaceae), with a reappraisal of sectional delimitation. *Botanical Bulletin of Academia Sinica* 43: 313–327.

Smith, L.B. 1973. *Begonia* of Venezuela. *Phytologia* 27: 209–227.

Smith, L.B. & Schubert, B.G. 1941a. Revisión de las especies Argentinas del género *Begonia*. *Darwiniana* 5: 78–117.

Smith, L.B. & Schubert, B.G. 1941b. Begoniaceae, Flora of Peru. *Field Museum of Natural*



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

History, Botanical Series 13: 181–202.

Smith, L.B. & Schubert, B.G. 1944. Revisión de las especies bolivianas del género *Begonia*. *Revista Universidad del Cuzco* 33: 71–93.

Smith, L.B. & Schubert, B.G. 1946a. Studies in the Begoniaceae II. Contributions from the Gray Herbarium of Harvard University 161: 26–29.

Smith, L.B. & Schubert, B.G. 1946b. The Begoniaceae of Colombia. Contributions from the Gray Herbarium of Harvard University 164: 1–38, 77–109, 179–209.

Smith, L.B. & Schubert, B.G. 1946c. The Begoniaceae of Colombia. *Caldasia* 4(16) 3-38.

Smith, L.B. & Schubert, B.G. 1946d. The Begoniaceae of Colombia. *Caldasia* 4(17): 77-107.

Smith, L.B. & Schubert, B.G. 1946e. The Begoniaceae of Colombia. *Caldasia* 4(18): 179-209.

Smith, L.B. & Schubert, B.G. 1950. Studies in the Begoniaceae III. *Journal of the Washington Academy of Sciences* 40: 241–245.

Smith L.B. & Schubert, B.G. 1955. Studies in Begoniaceae. *Journal of the Washington Academy of Sciences* 45: 110–114.

Smith, L.B. & Schubert, B.G. 1958. Begoniaceae. *In* R.E. Woodson & R.W. Schery (eds.), *Flora of Panama*. *Annals of the Missouri Botanical Garden* 45(1): 41–67.

Smith, L.B. & Schubert, B.G. 1961. Begoniaceae. *In* *Flora of Guatemala*. *Fieldiana Botany* 24(7): 157–185.

Smith, L.B. & Schubert B.G. 1971. Begoniaceae. *Flora Ilustrada Catarinense*. *Herbário Barbosa Rodrigues, Itajaí*.

Smith, L. B. & Wasshausen, D. 1986. Part I. Begoniaceae, illustrated key. *Smithsonian Contributions to Botany* 60: 1–129.

Standley, P.C. 1937. Begoniaceae. *In* *Flora of Costa Rica*. *Field Museum of Natural History, Botanical Series* 18(2): 737–748.

Stevens, P. F. (2001 onwards). Begoniaceae. *In* *Angiosperm Phylogeny Website*. Version 14, July 2017 [and more or less continuously updated since]." will do.
<http://www.mobot.org/MOBOT/research/APweb/>.

Steyermark, J.A. 1997. Begoniaceae. *In* P.E. Berry, B.K. Holst & K. Yatskievych (eds.), *Flora of Venezuela Guayana*. Volumen 3. *Missouri Botanical Garden, St. Louis*. 397–403

Tebbutt, M.C. 2005. *Begonias: Cultivation, identification and natural history*. Timber Press. 272 pp.



MUSEO NACIONAL DE COSTA RICA

Departamento de Historia Natural

Tebbitt, M.C. 2011. A new and unusual xerophytic species of *Begonia* (Begoniaceae) from Peru. *Edinburgh Journal of Botany* 68(2):1-6.

Tebbitt, M.C. 2015. Two new species of Andean tuberous *Begonia* in the *Begonia octopetala* group (Begoniaceae). *Novon* 23: 479-489.

Tebbitt, M.C. 2016. Two new species of Andean *Begonia* (Begoniaceae). *Edinburgh Journal of Botany* 73(1):143-152.

Tebbitt, M.C. 2017. Recircumscription and new synonyms of *Begonia acerifolia* (Begoniaceae) and amended descriptions of the poorly known *B. hydrophylloides* and *B. velata*. *Edinburgh Journal of Botany* 74(2):217-228.

Tebbitt, MC, Hughes, M, Pérez, AJ, Moonlight, PW. 2017. Taxonomy of the *Begonia tiliifolia* group, including descriptions of two new species. *Edinburgh Journal of Botany*. 74(2):199–215. <https://doi.org/10.1017/S0960428617000087>

Tebbitt, M.C. & Williamson, D.R. 2012. Unusual stamen morphology reported from two species of Andean *Begonia*. *The Begonian*. 79: 103

Twyford, A.D., Kidner, C.A., Harrison, N. & Ennos, R.A. 2012. Population history and seed dispersal in widespread Central American *Begonia* species (Begoniaceae) inferred from plastome-derived microsatellite markers. *Botanical Journal of the Linnean Society* 171: 260–276.

Ulloa Ulloa, C., Acevedo-Rodríguez, P., Beck, S. G., Belgrano, M. J., Bernal, R., Berry, P. E., Brako, L., Celis, M., Davidse, G., Gradstein, S. R., Hokche, O., León, B., León-Yáñez, S., Magill, R. E., Neill, D. A., Nee, M. H., Raven, P. H., Stimmel, H., Strong, M. T., Villaseñor Ríos, J. L., Zarucchi, J. L., Zuloaga, F. O. & Jørgensen, P. M. 2018 [Onwards]. An integrated Assessment of Vascular Plants Species of the Americas (Online Updates).

Uribe-Urbe. L. 1955. Flora de la Real Expedición Botánica del Nuevo Reino de Granada. Tomo XXVII: Passifloraceas y Begoniaceas de la Real Expedición Botánica del Nuevo Reino de Granada. Ediciones Cultura Hispánica. Madrid

Warburg O. 1894. Begoniaceae. *Die Natürlichen Pflanzenfamilien*. Leipzig: Wilhem Engelmann, 121–150.

Wyatt, G.E & Sazima, M. Pollination and reproductive biology of thirteen species of *Begonia* in the Serra do Mar State Park, São Paulo, Brazil. *Journal of Pollination Ecology*, 6(14), 2011, pp 95-107.