

A correction of the type of *Dictyota jamaicensis* W.R. Taylor (*Dictyotaceae*, *Phaeophyceae*, *Ochrophyta*)

Michael J. Wynne, *University of Michigan Herbarium, Ann Arbor, Michigan 48108, USA*
(correspondence: mwynne@umich.edu)

Craig W. Schneider, *Department of Biology, Trinity College, Hartford, Connecticut 06106, USA*

In his comprehensive flora of marine algae of the tropical and subtropical western Atlantic Ocean, William Randolph Taylor (1895–1990) described a dozen new taxa of green, brown, and red algae (Taylor 1960). These included two brown algal species with the same epithet from their type localities in Jamaica, *Dictyota jamaicensis* W.R. Taylor and *Dictyopteris jamaicensis* W.R. Taylor. The description of *Dictyota jamaicensis* (Taylor 1960: 223, 630, pl. 32: figs 4, 5) stated (p. 631, Latin description) that the type locality was “Christofers Cove, Drax Estates, in Paroecia St. Ann, in colonia Jamaicae legit W.R. Taylor, num. 56-227, 20 iii 1956 in herbariis Taylorii et Universitatis (isotypus)”. The “plantae typicae”, effectively the holotype, were deposited in the personal herbarium of W. R. Taylor and an isotype was deposited in the herbarium of the University of Michigan (**MICH**). The personal herbarium of W.R. Taylor was subsequently incorporated into **MICH** in the 1980s, and thus both specimens now reside there.

The description of *Dictyopteris jamaicensis* stated that the type locality was at 40 m depth near “Hellshire Hills... in Paroecia St. Catherine, in colonia Jamaicae” [Saint Catherine Parish, Jamaica]. Likewise, this was a Taylor collection, cited as no. WRT 56-227, 20.iii.1956, the type being deposited in the personal herbarium of W.R. Taylor with one isotype being deposited in **MICH** and a second in the “Musei Scientiarum ... Institutum Jamaicae, in loco Kingston, Jamaica”, now the Natural History Museum of Jamaica (**IJ**).

Taylor’s original determination of his *Dictyota* collection was *Dictyota ciliolata* Kützinger before he regarded it as representing the new species *Dictyota jamaicensis*. The original identification of his other taxon with the same epithet in Taylor (1960: 631) was *Dictyopteris membranacea* Batters [presently known as *D. polypodioides* (De Candolle) J.V. Lamouroux, the generitype], but he later treated it as the new species *Dictyopteris jamaicensis*.

What appears to have gone unnoticed since is that the same date and collection number provided in Taylor’s descriptions of these two species is that they were published with the same collection number, WRT 56-227, and same date, namely, 20 March 1956. Although both De Clerck (2003) and Tronholm *et al.* (2013) incorrectly refer to the type and holotype, respectively, of *Dictyota jamaicensis* as being **MICH** 29205, Taylor’s personal herbarium accession number prior to when he transferred his herbarium to **MICH**.

The purpose of this note is resolve this confusion. The intended holotype of Taylor’s *Dictyota jamaicensis* from Christofers Cove, Jamaica, has been located in **MICH** (Fig. 1), with a barcode number of **MICH** 620000. This specimen shows Taylor’s correct collection no. as WRT 56-56 and its date to be 25 February 1956. According to ICN Art. 9.2 (Turland *et al.* 2018), if there are errors in the designation of a holotype in the protologue of a taxon such as locality, date, collector, collecting number, herbarium code, specimen identifier or citation of an illustration, these errors should be corrected provided that the intent of the original author is not changed.

The taxonomic status of *Dictyota jamaicensis* has long been uncertain. For example, Dawson (1962), and later Hörnig *et al.* (1992) and De Clerck (2003), questioned whether it could be

distinguished from *Dictyota crenulata* J. Agardh (Agardh 1847: 7; type locality: San Agustín, Oaxaca, Pacific Mexico). However, in a later investigation using gene-sequence evidence, Tronholm *et al.* (2013) concluded that what had been called *D. crenulata* is comprised of at least four species and that *D. crenulata sensu stricto* was restricted to the coast of Pacific Central America, and *Dictyota jamaicensis* was reinstated as a species with a tropical amphi-Atlantic distribution. Tronholm *et al.* (2013) went on to separate two other species from *D. crenulata sensu lato*, namely, *Dictyota canariensis* (Grunow) Tronholm and the new species *Dictyota pleiacantha* Tronholm, both of these latter species with a range in Macaronesia of the eastern North Atlantic. Later, Lozano-Orozco *et al.* (2014) reported the occurrence of *D. canariensis* from Veracruz, Mexico. Thus, *Dictyota jamaicensis* has been reinstated as a species in the western Atlantic (Wynne, 2017; Gabriel & Fredericq, 2019; Ballantine *et al.*, 2021).

- Agardh, J.G. (1847). Nya alger från Mexico. *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar, Stockholm* 4: 5–17.
- Ballantine, D.L., Norris, J.N. & Ruiz, H. (2021). The marine benthic algal flora of Puerto Rico, I. Ochrophyta: Phaeophyceae, Pelagophyceae, and Xanthophyceae. *Smithsonian Contributions to Botany* 114: [i]–vi, [1]–114, 78 figs.
- Dawson, E.Y. (1962). Additions to the marine flora of Costa Rica and Nicaragua. *Pacific Naturalist* 3: 375–395, 5 pls.
- De Clerck, O. (2003). The genus *Dictyota* in the Indian Ocean. *Opera Botanica Belgica* 13: 1–205, 54 figs, 12 tables.
- Gabriel, D. & Fredericq, S. (2019). The marine macroalgae of Cabo Verde archipelago: an updated checklist. *Arquipélago, Life and Marine Science* 39: 39–60.
- Hörnig, I., Schnetter, R. & Prud'homme van Reine, W.F. (1992). The genus *Dictyota* (Phaeophyceae) in the North Atlantic. I. A new generic concept and new species. *Nova Hedwigia* 54: 45–62, 6 figs, 3 tables.
- Lozano-Orozco, J.G., Senties, A., Díaz-Larrea, J., Pedroche, F.F. & de Clerck, O. (2014). The occurrence of *Dictyota canariensis* (Dictyotales, Phaeophyceae) in the Gulf of Mexico. *Botanica Marina* 57(5): 359–365, 9 figs, 2 tables.
- Suárez, A.M., Martínez-Daranas, B. & Alfonso, Y. (2015). *Macroalgas marinas de Cuba*. pp. [1]–264, 229 figs. La Habana [Havana]: UH [Universidad de La Habana] Editorial.
- Taylor, W.R. (1960.) *Marine algae of the eastern tropical and subtropical coasts of the Americas*. pp. [i]–xi, 1–870, 14 figs, 80 pls. Ann Arbor: The University of Michigan Press.
- Tronholm, A., Afonso-Carrillo, J., Sanson, M., Leliaert, F., Fernández-García, C. & De Clerck, O. (2013). Taxonomy of the *Dictyota ciliolata-crenulata* complex (Dictyotales, Phaeophyceae). *Phycologia* 52 (2): 171–181, 45 figs, 1 table.
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T.W., McNeill, J., Monro, A. M., Prado, J., Price, M. J. & Smith, G.F. (eds.) (2018). *International code of nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. *Regnum Vegetabile* 159. Glashütten: Koeltz Botanical Books.
- Wynne, M.J. (2017). A checklist of benthic marine algae of the tropical and subtropical western Atlantic: fourth revision. *Nova Hedwigia Beiheft* 145: 1–202, 2 tables.
- Wysor, B. & De Clerck, O. (2003). An updated and annotated list of marine brown algae (Phaeophyceae) of the Caribbean coast of the Republic of Panama. *Botanica Marina* 46: 151–160, 17 figs.

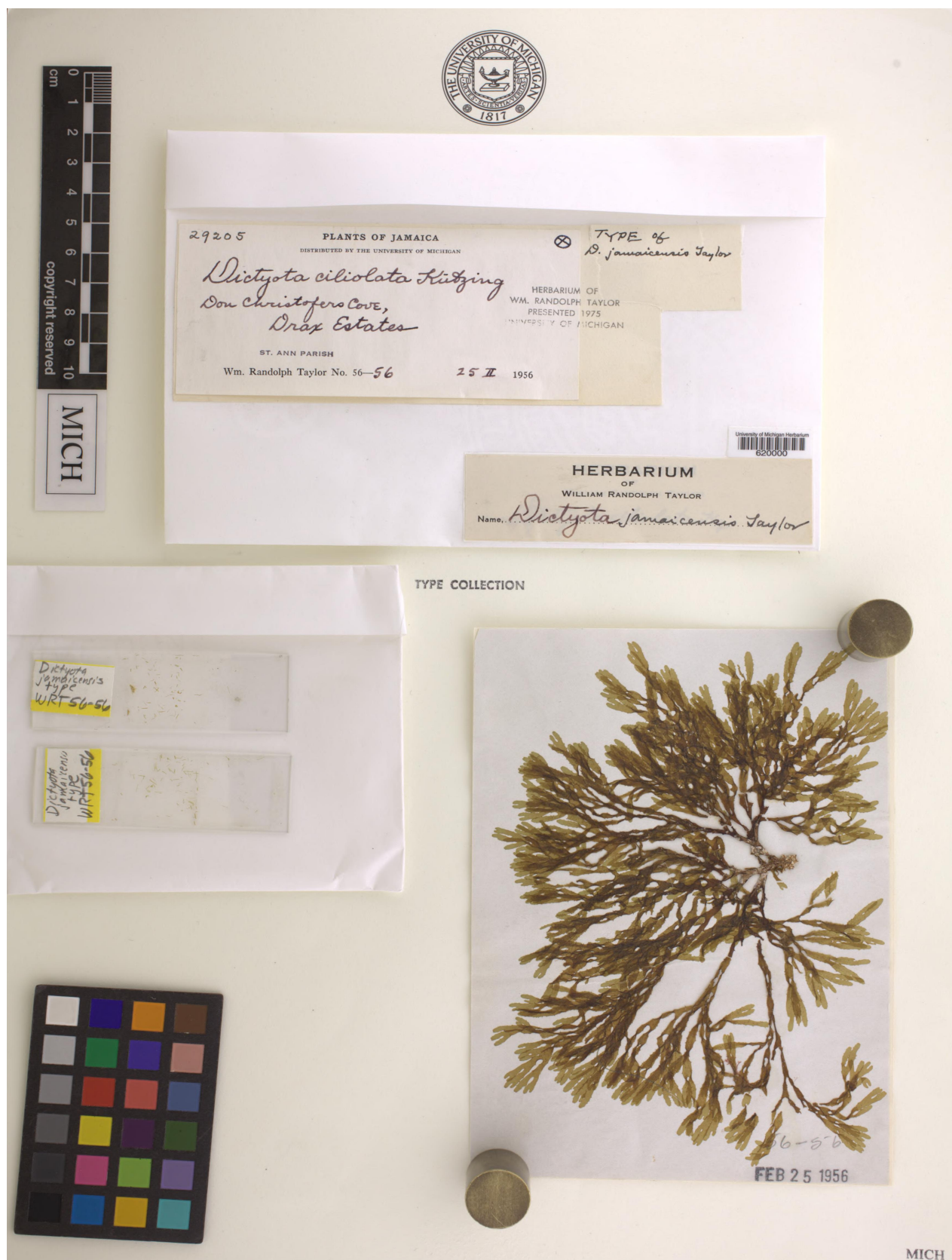


Fig. 1. Holotype of *Dictyota jamaicensis* W.R.Taylor [MICH 620000].