

distinct from *P. pachyrhizi* Syd. & P. Syd., they listed a number of synonyms for *P. meibomia* that had previously been considered synonyms of *P. pachyrhizi*. In addition, they listed a separate name, *Malupa vignae* (Bres.) Y. Ono & al. (l.c.: 831) for the asexual morph including its synonyms. With the change to one scientific name for fungi (Turland & al., l.c.), these names for the asexual morph compete for use. Three of these names provide earlier epithets for *Physopella meibomia* Arthur (in *Mycologia* 9: 59. 1917), the basionym of *Phakopsora meibomia*. None of these earlier names have been used to any extent (Google Scholar [GS] exact phrase search: “*Aecidium crotalariaicola*” = 11; “*Uredo teramni*” = 21; “*Uredo vignae*” = 21) whereas “*Phakopsora meibomia*” is widely used (GS = 1020) for the scientific name of the fungus causing Latin American soybean rust, a serious disease of soybean (Frederick & al., l.c.; Bonde & al. in *Pl. Dis.* 90: 708. 2006). Given the widespread use of the name *P. meibomia*, it seems preferable to conserve this name than adopt one of the earlier epithets.

Although Arthur (l.c.) indicated a type specimen of *Physopella meibomia*, he did not note the herbarium where it was deposited and also listed a second specimen, thus it is necessary to designate a lectotype specimen. He cited “Puerto Rico, Añasco, hillside, on *Meibomia supina* (Sw.) Britton (*Desmodium supinum* DC.), 28 Mar 1916, Whetzel & Olive 219”, thus **we designate here as lectotype**

(**MBT: 386692**) the specimen matching these data at PUR No. 3225. The type of *Aecidium crotalariaicola* is housed in B, having survived WWII according to Hein (l.c.) but because Hennings (in *Hedwigia* 38(Beibl.): 70. 1899) did not indicate an herbarium where it was deposited it is necessary to designate a lectotype with an isolectotype at S. Because the protologue of *Uredo teramni* does not indicate an herbarium for the type specimen, a lectotype housed at Mayor’s home institution is herein designated for this name with isolectotypes housed at CUP, PDD and S. Similarly, a lectotype for *U. vignae* is designated at S with isolectotype specimens at NY, PUR, and S.

Author information

MCA, <https://orcid.org/0000-0001-8742-6685>; AYR, <https://orcid.org/0000-0002-8191-2663>; YO, <https://orcid.org/0000-0002-8247-7245>; LAC, <https://orcid.org/0000-0002-6131-7736>

Acknowledgements

We thank the curators of mycological collections who provided information about type specimens including Robert Lücking (B), Teresa Iturriaga (CUP) and Jason Grant (NEU). USDA is an equal opportunity provider and employer.

(2691) Proposal to conserve the name *Asplenium erosum* (*Aspleniaceae*) with a conserved type

Weston Testo 

Department of Biology, 527 Bartram Hall, University of Florida, Gainesville, Florida 32611, U.S.A.

Address for correspondence: Weston Testo, westontesto@gmail.com

DOI <https://doi.org/10.1002/tax.12078>

(2691) *Asplenium erosum* L., *Syst. Nat.*, ed. 10: 1324. 7 Jun 1759, nom. cons. prop.
Typus: Jamaica, Browne in *Herb. Linnaeus* No. 1250.22 (LINN!), left-hand plant; isotypus: S No. S09-18021, left-hand plant), typ. cons. prop.

The name *Asplenium erosum* L. has long been used to refer to a spleenwort species from Jamaica, Cuba, and Hispaniola with blackish rhizome scales and once-pinnate leaves that feature conspicuous blackish scales along the rachis and trapeziform, coarsely serrate pinnae. This concept of the name has been applied in all regional floristic treatments of ferns (Proctor, *Prelim. Checkl. Jamaican Pterid.*: 10. 1953, in *Amer. Fern J.* 72: 107–114. 1982, *Ferns Jam.*: 359. 1985; Sánchez in *Brittonia* 69: 482–503. 2017) and systematics studies of *Asplenium* of the Greater Antilles (del Risco González & Sánchez in *Revista Jard. Bot. Nac. Univ. Habana* 22:

29–37. 2001; Regalado & Sánchez in *Grana* 41: 107–113. 2002, in *Bot. Complut.* 27: 11–25. 2003). Close examination of the type, however, indicates that this name has been misapplied and that *A. erosum* is actually the earliest name available for a very widespread and well-known species normally treated as *A. auritum* Sw. (in *J. Bot.* (Schrader) 1800: 52. 1801).

Available evidence suggests that Linnaeus based his concept of *Asplenium erosum* L. (*Syst. Nat.*, ed. 10: 1324. Jun 1759) on material that included multiple species from Jamaica. His original diagnosis of “*A. frond. pinnatis: pinn. trapetio-oblongis striatis erosio basi auctis*” is consistent with the modern concept of that species; however, the illustration (Sloane, *Voy. Jamaica* 1: 78, t. 33, fig. 2. 1707) that he referenced with this description depicts a plant that is clearly *A. auritum*. Nevertheless, later that same year the name *A. erosum* was associated by Linnaeus (*Fl. Jamaica*: 24. Dec 1759) with the description of an unnamed species of *Asplenium* in Browne (*Civ. Nat. Hist. Jamaica*:

94, *Asplenium* no. 11. Mar 1756). This association continued in the second edition of *Species plantarum* (Linnaeus, Sp. Pl., ed. 2: 1539–1540. 1763). As early as August of 1756, Linnaeus had begun to examine Browne’s just-published work (correspondence of Linnaeus to Browne: <http://linnean-online.org/777772154/>), and in July of 1758 he acquired Browne’s Jamaican herbarium (Smith, Corr. Linnaeus 1: 51. 1821), nearly a year before his *Systema naturae* treatment was published. A mixed sheet (LINN 1250.22, <http://linnean-online.org/12540/>) in the Linnaean Herbarium includes material of both *A. erosum* (left-hand specimen) and *A. dimidiatum* Sw. (right-hand specimen). This mixed collection is annotated at the bottom with “*Aspl. erosum*” and what appears to be the letter “C”. Weatherby (in Contr. Gray Herb. 114: 20. 1936) maintains that the handwriting is that of Linnaeus and the “C” implies that the specimen was included in his *Systema naturae*, although the name was there labelled as species “D”. The sheet lacks Linnaeus’s characteristic notation “Br.” generally associated with his Browne specimens, for which the annotations were supposedly supplied by Linnaeus’s pupil Solander (Smith, l.c.: 43; Jackson, Index Linn. Herb.: 10. 1912; Jarvis, Order out of Chaos: 195. 2007). However, an apparent duplicate with the same mixture of species exists in S (No. S09-18021, <http://herbarium.nrm.se/specimens/S09-18021>), labelled “Jamaica” and “*erosum*” in Solander’s handwriting, and with origin “Patr. Browne. Herb. Solandri – Ex Herbario Linnaei”, so it is reasonable to assume that both the LINN and S sheets were collected by Browne and available to Linnaeus before 1759. Nevertheless, it is clear from the study of these elements associated with the name *A. erosum* that two or perhaps three currently recognized species of *Asplenium* were included in Linnaeus’s concept.

In 1906, Underwood (in Bull. Torrey Bot. Club 33: 196. 1906) lectotypified *Asplenium erosum* based on Sloane’s (l.c.) illustration. In that paper, he recognized that Swartz (l.c.) cited the same illustration when establishing *A. auritum* Sw. and stated that “there is probably a specimen in Swartz’s herbarium that will naturally take precedence of a cited plate in determining the type of the species.” Underwood (l.c.) also stated that Linnaeus “based his name wholly on Sloane’s plate”; the existence of the Browne collection at the Linnaean Herbarium annotated as *A. erosum* demonstrates this claim to be mistaken. In 1936, Weatherby (l.c.) indicated that the left-handed specimen of what he took to be a Browne collection (LINN 1250.22) was the appropriate type of *A. erosum*; he did not mention and was apparently not aware of Underwood’s earlier lectotypification. Though the type choice of Weatherby (l.c.) has been adopted nearly universally by later authors (Proctor, l.c. 1953, l.c. 1985; Regalado & Sánchez, l.c. 2002, l.c. 2003; Sánchez, l.c.), Underwood’s (l.c.) lectotypification has priority

(ICN Art. 9.19, Turland & al. in Regnum. Veg. 159. 2018; Jarvis, l.c.: 327–328).

Underwood’s (l.c.) lectotypification makes *Asplenium auritum* a synonym of *A. erosum* and has destabilized the application of these names. First, the name *A. erosum*, which has been in common use only among workers in the Greater Antilles, supplants the familiar *A. auritum* as the name for one of the most widespread and well-known species of *Asplenium* in the American tropics (Proctor, l.c. 1985; Proctor in Mem. New York Bot. Gard. 53: 230. 1989; Tryon & Stolze in Fieldiana, Bot., ser. 2, 32: 42. 1993; Adams in Moran & Riba, Fl. Mesoamer. 1: 297. 1995; Mickel & Smith in Mem. New York Bot. Gard. 88: 83. 2004; Sánchez, l.c.; Kessler & Smith in Phytotaxa 344: 259. 2018). Second, plants currently treated as *A. erosum* would need a name change; the little-known name *A. falx* Desv. (in Mém. Soc. Linn. Paris 6: 274. 1827) would be the appropriate name for these. Further, the complexity of nomenclatural changes necessitated by Underwood’s type selection is amplified by the existence of a multitude of infraspecific names associated with these species: 2 varieties of *A. erosum* and 23 varieties of *A. auritum* have been published. To avoid these disruptions and maintain nomenclatural stability, it is proposed here to conserve the name *Asplenium erosum* L. with a conserved type that will preserve the historical and contemporary application of that name and of *A. auritum* Sw. The proposed type specimen is *Browne s.n.* (LINN 1250.22; left-hand specimen), which represents original material of *A. erosum* and is the same specimen proposed by Weatherby (l.c.). The specimen was collected in Jamaica and is part of a mixed collection with *A. dimidiatum* Sw. annotated as “*Aspl. erosum*”. The specimen consists of a single fertile leaf and is conspecific with material currently treated as *A. erosum* in the Greater Antilles.

Author information

WT, <https://orcid.org/0000-0003-3194-5763>

Acknowledgements

I thank Jefferson Prado (SP), Robbin Moran (NY), Michael Sundue (VT), and Walt Judd (FLAS) for insightful conversations and suggestions. Lucas Majure (FLAS), Robbin Moran, Arthur Gilman, Jefferson Prado, David Barrington (VT), John Wiersema (US), and John McNeill provided helpful comments on an earlier version of this manuscript. I am thankful to the keeper and staff at the University of Florida Herbarium (FLAS) for providing access to resources necessary to carry out this research.