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A new combination in *Ardeuma* (Pottiaceae, Bryophyta)

Richard H. Zander and John C. Brinda

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A correct combination in *Ardeuma* R.H. Zander & Hedd., *A. annotinum* (Mitt. ex Dixon) R.H. Zander & Brinda, is provided for the species *A. insigne* (Dixon) R.H. Zander & Hedd., which is not the first name available at the species level. Distinctions between the genera *Ardeuma* and *Hymenostylium* are tabulated.

A study (Zander and Hedderson 2016) of *Hymenostylium xanthocarpum* (Hook.) Brid., an uncommon species now known from Republic of Cameroon, La Réunion, India and Nepal, revealed that this species was quite distinct from the widespread *H. recurvirostrum* (Hedw.) Dixon and its several related species. A new genus was proposed for the latter, *Ardeuma* R.H. Zander & Hedd. The distinguishing traits are tabulated here (Table 1).

The second author noticed that the combination in *Ardeuma* in that paper for *Hymenostylium recurvirostrum* var. *insigne* (Dixon) E.B. Bartram was not the earliest available at the species level, and this is here corrected.

Ardeuma annotinum (Mitt. ex Dixon) R.H. Zander & Brinda, **comb. nov.**

Basionym: *Hymenostylium annotinum* Mitt. ex Dixon, J. Bot. 48: 308. 1910. Type: Bhutan, India, Griffith 17 (BM! isotype).

Weissia recurvirostra var. *insigne* Dixon, J. Bot. 40: 377. 1902. *Hymenostylium recurvirostrum* var. *insigne* (Dixon) E. B. Bartram, Philipp. J. Sci. 68: 106. 1939. *Hymenostylium insigne* (Dixon) Podp., Consp. Musc. Eur. 173. 1954. *Gymnostomum insigne* (Dixon) A.J.E. Sm., J. Bryol. 9: 279. 1976. *Ardeuma insigne* (Dixon) R.H.Zander &

Table 1. Comparison of salient differential features of *Ardeuma* and *Hymenostylium*.

| Character | <i>Hymenostylium</i> | <i>Ardeuma</i> |
|-------------------------|------------------------------|-------------------------------|
| Central strand presence | present | absent |
| Leaf shape | long-elliptical | lanceolate |
| Leaf base shape | short-ovate | long-ovate to rectangular |
| Leaf constriction | wasp-waisted | absent |
| Laminal cells | bulging strongly adaxially | convex on both sides |
| Laminal papillae shape | simple to 2-fid | punctate to multiplex |
| Laminal papillae size | covering more than 1/2 lumen | covering 1/3 or less of lumen |

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Ardeuma annotinum differs from its most common congeners by the combination of leaves 2–2.5 mm in length, sharply reflexed above a broad base; distal marginal cells bistratose in patches, laminal papillae mostly bifid, often crowded; costa excurrent, guide cells 4–7, and adaxial epidermal costal cells differentiated. This species, discussed as *Hymenostylium annotinum*, was treated at length by Zander and Eckel (1982). Several other synonyms are provided by Eckel (2009). Additional discussion and keys to the species in the New World are given by Cano and Jiménez (2013).

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