

Muscis Hawaiiensis Mantissae I: Two weedy species of *Bryum* new to the archipelago

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Abstract: *Bryum lisae* var. *cuspidatum* and *B. radiculosum* were collected in xeric, lowland habitats on the islands of Oahu and Kauai, respectively, and constitute the first records for either species for the Hawaiian archipelago.

Studies of avian paleontology in the Hawaiian Islands regularly take me to habitats that most bryologists would not find attractive. Incidental collecting of mosses in these areas has produced two species that have not hitherto been reported from the archipelago (Hoe, 1974). Both are weedy and very widespread in continental areas, so their occurrence in the Hawaiian Islands, probably the result of indirect human transport, is not particularly surprising.

Bryum lisae DeNot. var. *cuspidatum* (Bruch & Schimp.) Margad.: HAWAIIAN ISLANDS: Oahu, Barbers Point, xeric area near state archeological site 50-Oa-B6-22 (see Olson and James, 1982), 8 August 1992 (Olson 195, NY). Growing on limestone of raised coral reef on a small bank of an old railroad cut. The plants were without sporophytes and the gametophytic rosettes were growing in a heavy protonematal mat. That the samples might prove of interest was suggested by that fact that some specimens

were clearly synoicous, a condition that occurs in few, if any, native Hawaiian mosses (Hoe, 1979).

Most of the area of Barber's Point, Oahu, consists of a raised limestone reef. Naturally occurring calcareous environments, apart from dunes, are exceedingly scarce in the Hawaiian Islands. Whether such an environment contributed to successful colonization of Oahu by *B. lisae* is uncertain, as the species is not an obligate calciphile elsewhere in its range (Crum and Anderson, 1981).

Bryum radiculosum Brid.: HAWAIIAN ISLANDS: Kauai, ca. 2 km S of Koloa, near mouth of „Cave 24“, S of cane haul road near „Civil Defense Cave (#15). 23 August 1992 (Olson 238, NY). The plants were growing profusely, with abundant sporophytes, on exposed soil and flat basaltic rocks in a field of sugarcane (*Saccharum officinarum* L.).

Acknowledgments

I am grateful to Harold Robinson for identification of *B. lisae*, and William Buck for confirming same, identifying *B. radiculosum*, and for comments on the manuscript. The manuscript was also read by William J. Hoe.

References

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