## OCCASIONAL PAPERS

OF

## BERNICE P. BISHOP MUSEUM HONOLULU, HAWAII

Volume XIII

May 17, 1937

Number 8

## A New Species of Hawaiian Eragrostis By LEO D. WHITNEY

HAWAII AGRICULTURAL EXPERIMENT STATION

Eragrostis Fosbergii, new species (fig. 1).

Plantae perennae, culmi caespitosi 60-100 cm. alti glabri, vaginae glabrae, laminae planae vel involutae ad apices 40-60 cm. longae 5-10 mm. latae scabrae in superficibus glabrae in paginis inferioribus, paniculae pyramidatae semistrictae 20-40 cm. longae ramifere paene ad basim spiculiferae axillae ramorum pilosae, spiculae compressae 4-5 mm. longae 3-5 florae, glumae aequales angustae acuminatae 2-3 mm. longae carina scabra ciliata, lemmata acuminata 2.5-3 mm. longa carina scaberula, paleae 2.5-2.75 mm. longae carinae ciliati-scabrae.

Plants perennial; culms tufted, stout, usually from a geniculate woody base, 60-100 cm. tall, glabrous; lower internodes often exposed; sheaths glabrous, basal ones often purple, pilose or glabrous at throat; ligule a dense row of short hairs 0.3 mm. long intermixed with deciduous hairs as much as 7 mm. long; blades coriaceous, flat but involute toward the slender tip, 40-60 cm. long, 5-10 mm. wide, scabrous on upper surface, glabrous beneath; panicles pyramidal, somewhat open, 20-40 cm. long; branches with pilose axils, bearing spikelets almost to base, lower branches glabrous and upper scabrous; spikelets pale to dark green, compressed, 4-5 mm. long, 3-5-flowered, rarely as much as 10flowered; glumes readily deciduous, nearly equal, slender, narrowly acuminate, 2-3 mm. long, scabrous on the keel, usually auriculate at base, long-ciliate; lemmas acuminate, rather loosely imbricate, somewhat disclosing the scabrous rachilla, 2.5-3 mm. long, occasionally ciliate, scaberulous on the keel; palea usually conspicuous, bidentate or truncate, 2.5-2.75 mm. long, ciliate-scabrous on the keel; anthers yellow, 1-1.2 mm. long; stigmas inconspicuous, yellow, 0.5-0.75 mm. long.

Oahu: Waianae Mountains, east slope of Mount Kaala, in dry forest, alt. 2,400 ft., Jan. 8, 1933, F. R. Fosberg 9085 (type, Bishop Museum); same location on Mount Kaala, Feb. 11, 1928, H. F. Bergman; same location, Dec. 6, 1935, Whitney 3998; four miles south of Mount Kaala, on dry, rocky ridge, alt. 3,000 ft., Mar. 23, 1936, Whitney 4095.

Eragrostis Fosbergii is unique in having its glumes long-ciliate and at base usually auriculate and having its lemmas occasionally ciliate. This sets it apart from E. grandis Hillebr., its nearest relative. It grows in dry, rocky situations and is evidently restricted to Mount Kaala and a few ridges in its vicinity on Oahu.

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This new species is named in honor of Mr. F. R. Fosberg of the University of Hawaii, student of Polynesian botany.

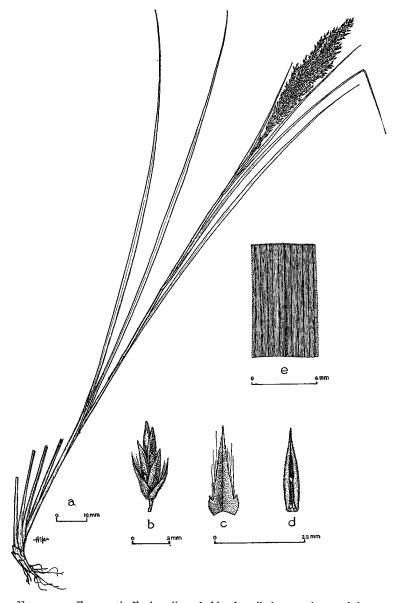


FIGURE 1.— $Eragrostis\ Fosbergii:\ a,\ habit;\ b,\ spikelet;\ c,\ glume;\ d,\ lemma;\ e,\ leaf\ blade,\ cross-section.$