

Observations on Hawaiian *Panicum* and *Sapindus*  
Hawaiian Plant Studies 61

Harold St. John  
Bishop Museum, Honolulu, Hawaii 96818

Gramineae

*Panicum conjugens* Skottsb., Göteb. Bot. Trädg.,  
Meddel. 15: 298, figs. 106, 125-135, 1944.  
Lectotype: Hawaiian Islands, Kauai Island,  
Alakai, bog along trail from Lehua makanoe toward  
Kilohana, 13/8/1938, O. H. Selling 2,886 (BISH),  
here designated.

The species was based on three collections,  
without a positive designation of a holotype.  
One specimen was mentioned as a smaller form,  
a second one was said to be possibly the same.  
The third, Selling 2,886, agrees with the  
diagnosis, so it is here chosen as lectotype.

*Panicum gracilius* (Skottsb.) comb. nov.

*P. hillebrandianum* Hitchc., var. *gracilius*  
Skottsb., Göteb. Bot. Trädg., Meddel. 15:  
296, figs. 118-124, 1944.

*P. Hillebrandianum* is native to the bogs of  
west Maui. It has the spikelets 2.7-3.3 mm long;  
first glume 0.8-2.1 mm long; second glume 2.5-3.3  
mm long; sterile lemma 2.5-3 mm long; and the  
sterile palea 1.1-1.5 mm long. *P. gracilius* of  
the Alakai bogs, Kauai, has the spikelets 2.3-2.8  
mm long; first glume 1-1.7 mm long; second glume  
2.4-2.6 mm long; sterile lemma 2.3-2.5 mm long;  
and the sterile palea 1.5-1.6 mm long.

It seems to be a clearly distinct species.

Sapindaceae

*Sapindus Thurstonii* Rock, Hawaii Board Agric. &  
For., Bull. 1: 6, fig. 2, pl. 3, 1911; Fedde,  
Repert. 10: 368, 1912.

*S. saponaria* L., var. *Thurstonii* (Rock) Skottsb.,  
Göteb. Bot. Trädg., Meddel. 2: 244, 1926.

*S. Saponaria* L., forma *inaequalissensu* Radlk.,  
as to Hawaiian tree, Engler's Pflanzenreich  
IV, 165(3): 646, 650, 1932; Fagerlund &  
Mitchell, Hawaii Natl. Park, Nat. Hist. Bull.



9: 45, 1944; St. John, Pacif. Trop. Bot. Gard., Mem. 1: 225, 1973; non (DC.) Radlk., in Engler's Pflanzenreich IV, 165(3): 646, 1932.

S. Saponaria L., forma microcarpus sensu Radlk. as to Hawaiian tree, Engler's Pflanzenreich IV, 165(3): 646, 651, 1932, non (Jardin) Radlk., l. c. 646, 1932.

S. Saponaria, as to Hawaiian tree, Rock, Ind. Trees Hawaii, 271-273, pl. 104-106, 1913; Degener, Ferns Fl. Pl. Hawaii Natl. Park 202, 204, pl. 55, (1930); Lamoureux, Trailside Pl. Hawaii Natl. Park, 47, color fig., (1977); non L., Sp. Pl. 367, 1753.

The Hawaiian native Sapindus tree, called "mānele" or "a'e," occurring on Hawaii and Maui, in botanical classification has fluctuated from species, to forma, to variety, to a synonym of the tropical American S. Saponaria, or to two of its formae. J. F. Rock first described it in 1911 as a new species, S. Thurstonii, but in 1913, after reexamination of the material, he reduced it and made it a synonym of the American S. Saponaria. The monographer Radlkofer placed it in two of his formae under S. Saponaria. Skottsberg in 1926, on review of the problem, noted that the Hawaiian trees had leaves with a narrower leaf rhachis and smaller fruit. He then published it as S. Saponaria L., var Thurstonii (Rock) Skottsb.

During several visits to large herbaria, the writer has studied extensive collections of the tropical American S. Saponaria L. He found that it had the petioles winged or wingless; rhachis winged; leaflets (6) 8-14; sepals glabrous without, or sparsely remotely puberulent at base, but the margins ciliate; petals with a 1 mm claw, white pilose, the limb 1.3-1.5 mm long, broadly elliptic, minutely ciliolate, but otherwise glabrous; filaments to 3 mm in length, the lower 2/3 villous. The Hawaiian S. Thurstonii has the petioles wingless; rhachis wingless; leaflets 6-10 (-12); sepals densely pilosulous without, except in the upper part covered in bud; the margins ciliolate;

petals with a 0.7 mm pilose claw and a limb 2.8 mm long, 1.5 mm wide, elliptic, pilose within and without, except near the ciliate upper margin; filaments to 2.5 mm long, the lower 2/3 densely pilose.

In conclusion, the differences tabulate<sup>d</sup> above seem adequate for the recognition of the Hawaiian trees as an endemic species, properly named Sapinus Thurstonii Rock.





St. John, Harold. 1977. "OBSERVATIONS ON HAWAIIAN PANICUM AND SAPINDUS HAWAIIAN PLANT STUDIES PART 61." *Phytologia* 36, 465–467.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/48956>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/176391>

**Holding Institution**

New York Botanical Garden, LuEsther T. Mertz Library

**Sponsored by**

The LuEsther T Mertz Library, the New York Botanical Garden

**Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Phytologia

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.