

NEW HAWAIIAN SPECIES OF PIPTURUS

By

VLADIMIR KRAJINA

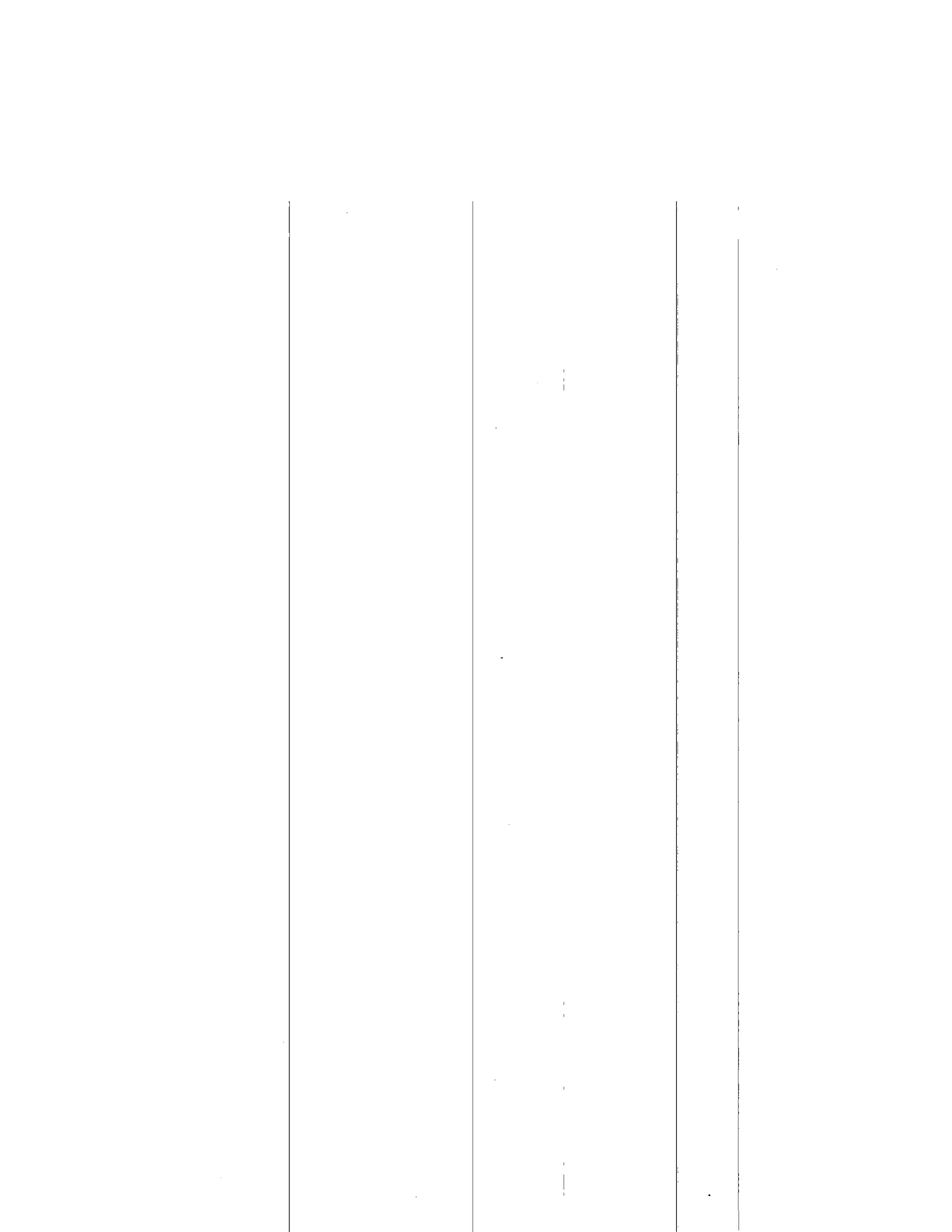
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## NEW HAWAIIAN SPECIES OF PIPTURUS

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**Pipturus skottsbergii**, species nova (Pl. I).

?*Pipturus albidus*  $\beta$  var. Hillebrand: Flora of the Hawaiian islands,  
p. 414, 1888.

Frutex vel arbor, 3-6 m. alta, ramis sparsis, foliosis dense griseo-puberulentibus, foliis longe petiolatis, ovatis vel ellipticis, rarius rotundatis, 6-25 cm. longis, 3-25 cm. latis, apice acuminatis vel acutis, basi contractis vel retusis, serrato-crenatis, recentibus supra graminose-viridibus, sparsim breviter hispidulis, inter areolis nervulorum manifeste bullosis et rugulosis, infra viride-griseis vel glaucescentibus, breviter dense hispidulis, petiolis 2-10 cm. longis, hispidulis, glaucescentibus, stipulis angustissimis vix prominentibus, caducis. Floribus pauperis glomeratis, axillaribus, sessilibus. Planta dioica vel monoica. Flores masculini perigonio, flores femini perigonio atque ovario breviter hispiduli, glaucescentes. Stigma 2-3 mm. longum, puberulum, siccum fuscum. Fructus?

Oahu: Waianae Mountains, near the stream in the valley east of Puu Hapapa, altitude 450 to 500 meters, V. Krajina, March 16, 1930. Type, B. P. Bishop Mus. No. 1.

*Pipturus skottsbergii*, which is named in honor of Carl Skottsberg, Professor of Botany, Gothenburg, Sweden, differs greatly from *P. albidus* A. Gray in its more scattered and bigger branches; its leaves, which are glaucous, not white, below and grass-green above, distinctly bullate, not glabrous; and its densely pubescent flower clusters. It differs from *P. ruber* Heller in its more slender, puberulent, and not hispid branches; its leaves, which are more densely hirsute above (not only in the main nerves but sparingly in the whole surface), finely bullate, not rugose, below less hispidulous with short hairs, not tomentose hirsute, young veins glaucous not red; and its much smaller flower clusters. It differs from *P. kawaiensis* Heller in its stronger and more scattered branches, which are erect and not drooping; its broader, less acuminate leaves, above bullate, not granulose, below glaucous, hispidulous, not white tomentose; its hispidulous petioles; and its more densely pubescent flower clusters. It differs from *P. hawaiiensis* Léveillé, of which doubtful species a specimen is in the herbarium of Bernice P. Bishop Museum, especially in its bullate and rugulose, not granulose, leaves, and also in its glaucous flowers.



PLATE I. *Pipturus skottsbergii* Krajina Type.

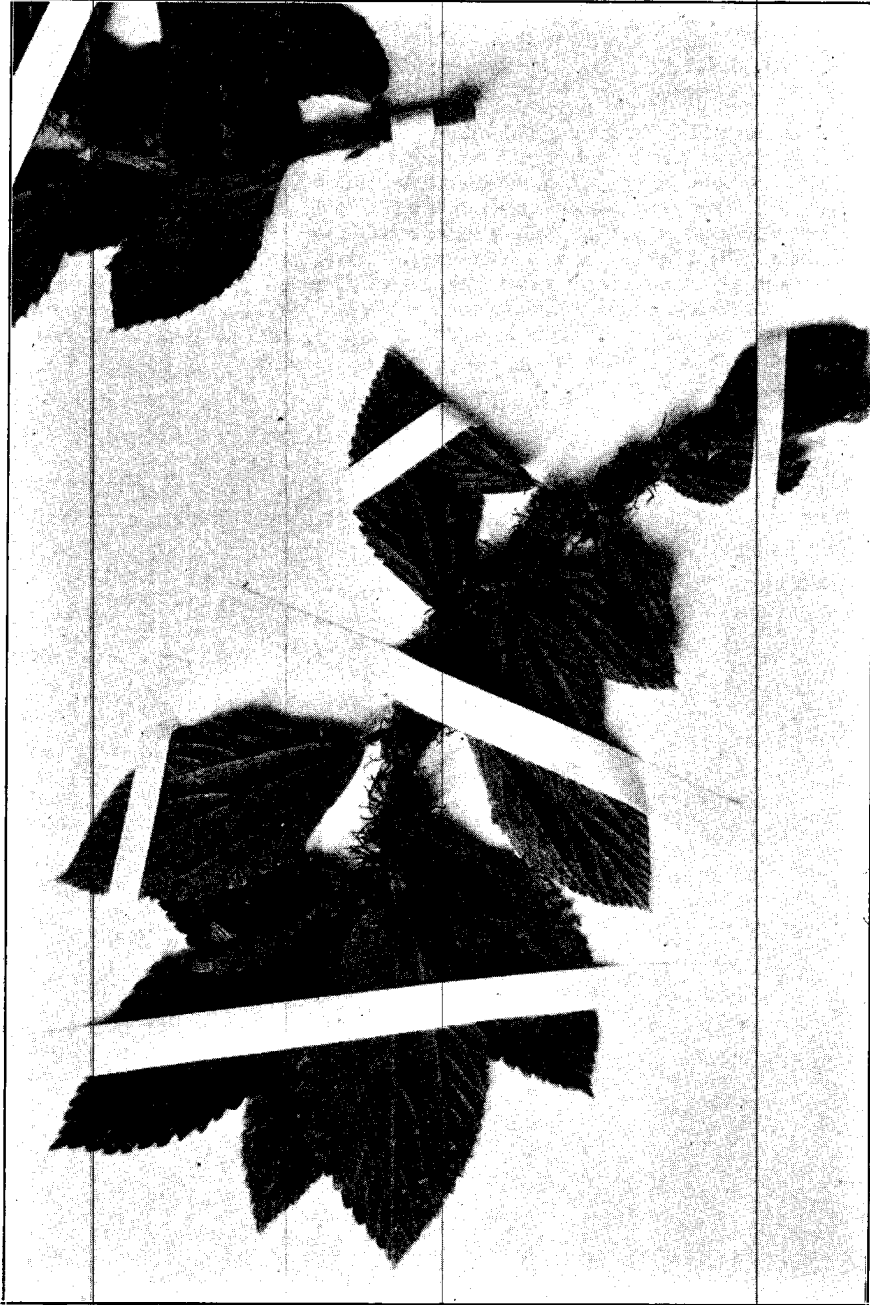


PLATE II. *Pipturus forbesii* Krajina. Part of type sheet.

***Pipturus forbesii*, species nova (Pl. II).**

Frutex vel arbor? ramis dense foliosis, longe atque densissime tomentose-hispidulis; foliis breviter petiolatis, ovatis, parvis, 2-5 cm. longis, 1.5-3 cm. latis, crenato-serratis vel serratis, coriaceis, scabris, supra rugosis sparsimque pilis solitariis vestitis, infra tota superficie adpresse glauco- vel rufescenti- (planta sicca!) tomentosa, nervis non solum tribus principalibus, sed etiam secundariis prominentibus, pilis hispidis armatis, petiolis brevissimis, 2-7 mm. longis, pilis hispidis usque 1 mm. longis dense vestitis, stipulis lanceolatis hispidis, 5-7 mm. longis, 2-3 mm. latis, cetera parte folii longius persistentibus. Floribus permultis glomerulis axillaribus adpressis. Planta dioica. Flores masculini ignoti. Ovarium dense hispidum, stigma 4-5 mm. longum, hispidulum, siccum fuscum. Fructus?

Maui: In the vicinity of Ukulele, altitude about 1500 meters, C. N. Forbes, July 13, 1919. Type, B. P. Bishop Mus. No. 979 M.

*Pipturus forbesii*, which is named in memory of C. N. Forbes, is very different from all species of *Pipturus* as yet known, especially in its small, shortly petiolate, coriaceous, rugose leaves with persistent stipules, and its longer stigmas (4-5 mm.).