

NEW ADDITIONS TO THE FLORA OF TAIWAN (II)

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During our work on the revision of the genus *Rubus* of Taiwan, we found three species that are with the characteristics do not agree with any of the present species recorded in Taiwan. After careful examination of the specimens concerned and special references made to the literature, we concluded that two of these three species of *Rubus* are hitherto undescribed ones. While the rest one of the three is identical with *Rubus hui* Diels, a native to central and southern mainland China, so it is a new record to the flora of this island.

(1) *Rubus (Idaobatus) incanus* Sasaki ex Liu et Yang, sp. nov. (Plate I)

Rubus incanus Sasaki in sched.

Frutex ramosus, armatus. Rami ramulisque teretiusculi, tenuiter pubescentes, demum glabrati, remote aculeati; aculeis basi dilatatis, apice deorsum plus minusve recurvis. Folia pinnatim 5-foliolata, petiolata; petiolis 6-11 cm. longis, pubescentibus; stipulis linearibus, circa 5 mm. longis, a petiolo oriundis ab axilla 1 mm. distantibus, pubescentibus; foliolis chartaceis, margine duplicato-serratis, basin versus integris, supra subglabris vel tenuissime pubescentibus, subtus densissime pallido-tomentosis, costis nervisque supra compressis, subtus distincte elevatis, remote aculeolatis, venulis utroque indistinctis, nervis lateralibus utroque costae latere 5-8, mediis a costa sub angulo circa 30°-40° prodeuntibus; foliolis terminalibus longissime petiolulatis, subrhomboidis, 4.5-6.0 cm. longis, 2.0-3.5 cm. latis, apice acuminatis vel acutis, basi cuneatis vel obtusis; foliolis lateralibus sessilibus, elliptico-rhomboidis, 2.0-4.5 cm. longis, 1.0-2.5 cm. latis, apice acuminatis, basi oblique obtusis vel cuneatis. Flores in apice ramulorum paniculati, pedunculis 5-10 cm. longis; pedicellis 1 cm. longis, pedunculisque dense pubescentibus; calyces cupulari, lobis triangulo-ovatis, 5-6 mm. longis, 3.0-3.5 mm. latis, apice mucronatis utroque dense pallido-pubescentes. Fructus subglobosis, 5-7 mm. in diametro.

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Shrubs ramous and armed. Branches and branchlets rather terete, thinly pubescent, glabrous at last, sparsely prickled; prickles dilated at the base, more or less recurved at the apex. Leaves pinnately 5-foliolate, petiolate; petioles 6-11 cm. long, pubescent; stipules linear, about 5 mm. long, the adnation from the base of the petiole about 1 mm. long, pubescent; leaflets chartaceous, margins duplicate-serrate, becoming entire toward the base, upper surface sub-glabrous or thinly pubescent, lower surface densely white-grey tomentose, midrib and nerves impressed above, distinctly elevated beneath, sparsely prickled, veinlets indistinct on both surfaces, lateral nerves 5-8 per side, spreading at an angle of 30°-40° from the midrib; terminal leaflets with long petioles, subrhomboid, 4.5-6.0 cm. long, 2.0-3.5 cm. wide, apex acuminate or acute, base cuneate or obtuse; lateral leaflets sessile, elliptic-rhomboid, 2.0-4.5 cm. long, 1.0-2.5 cm. wide, apex acuminate, base oblique, obtuse or cuneate. Flowers paniculate, terminating the branchlets; peduncles 5-10 cm. long; pedicels 1 cm. long, together with peduncles densely pubescent; calyces cupular, the lobes triangular-ovate, 5-6 mm. long, 3.0-3.5 mm. wide, apex mucronate, densely white-pubescent on both sides. Fruits subglobose, 5-7 mm. in diameter.

Habitat: Nan-hu-ta-shan (Nankotaizan) (南湖大山), Sasaki s.n., July 22, 1922, Suzuki, Fukuyama & Shimada 17687; Lan-shan (鸞山), Kuo 2468, 1511; Ta-yu-ling (大禹嶺), Kuo 2630; Tien-hsian (天祥), Chuang & Kao 4390; Neng-Kao-shan (Mt. Noko) (能高山), Sasaki s.n., Aug. 4, 1919 (Typus!); Mt. Ta-lu-ger (太魯閣山), Suzuki 9503; Mt. Muh-kwa (木瓜山), Kao 4162, 4165.

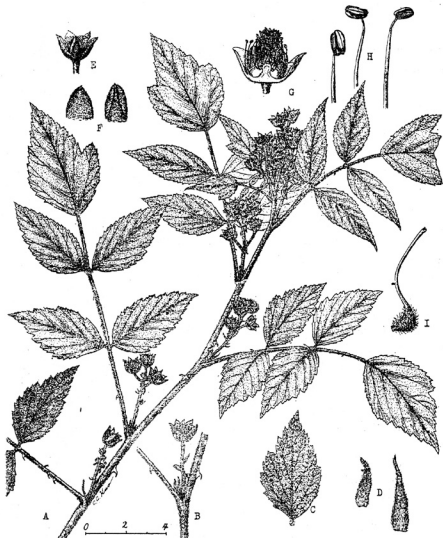
Distribution: Endemic.

Type specimen: In herbarium, Department of Botany, College of Science, National Taiwan University.

This new species is very similar to *R. mesogaeus* Focke, but differs from it in having paniculate flowers and 5-foliolate leaves; while the latter has cymose flowers and 3-foliolate leaves.

(2) *Rubus (Idaobatus) suzukianus* Liu et Yang, sp. nov. (Plate II)

Fruticosis. Rami et ramuli tereti, atropurpurei, nitidi, glabri, aculeati; aculeis 3-4 mm. longis, basi dilatatis, falcatis vel plus minus recurvis. Folia 3-5-foliolata, suprema interdum simplicia, petiolata; petiolis 2-3 cm. longis, supra canaliculatis, remote aculeolatis; stipulis a petiolo oriundis ab axilla circa 3 mm. distantibus, linearibus, 5-6 mm. longis, glabris; foliolo terminali ovato-elliptico, 4-6 cm. longo, circa 3 cm. lato, apice breviter acuminato vel acuto, basi rotundato, margine

Plate I. *Rubus incanus* Sasaki ex Liu et YangA. Flowering branchlet ($\times 1/1$).B. Portion of flowering branchlet ($\times 2$).C. Leaf, back view ($\times 1/1$).D. Stipules ($\times 6$).E. Flower ($\times 2$).F. Sepals ($\times 4$).G. Longitudinal section of flower ($\times 4$).H. Stamens ($\times 15$).I. Pistil ($\times 15$).