2. NEUWIEDIA Blume, Nov. Pl. Expos. 12. 1833.

三蕊兰属 san rui lan shu

Chen Xinqi (陈心启 Chen Sing-chi); Stephan W. Gale, Phillip J. Cribb

Herbs, erect. Rhizome usually retrorse, with several stout aerial roots. Stem often stiff and woody at base, not branched. Leaves several to many, plicate, basally contracted into a clasping, petiole-like stalk. Inflorescence erect, terminal, racemose, not branched; peduncle with several foliaceous sterile bracts; floral bracts relatively large, green. Flowers resupinate, almost actinomorphic, not opening widely; ovary 3-locular, distinct from pedicel. Sepals and petals often connivent. Sepals similar or lateral ones slightly oblique, fleshy. Petals similar; lip usually slightly different in shape and larger than petals. Column straight, often short, with 3 fertile stamens; central stamen often shorter than lateral ones; lateral stamens often with locules unequal in length; anthers free but filaments connate at base and adnate to style for much of their length; pollen not cohering to form pollinia; style narrowly cylindric, apex with slightly dilated stigma. Fruit either a berry or a dry capsule dehiscent at maturity. Seeds black, with rigid testa, sometimes with dilated elongate appendages at both ends.

About ten species: from S China through SE Asia and New Guinea to the SW Pacific islands; one species in China.

1. Neuwiedia singapureana (Wallich ex Baker) Rolfe, Bull. Misc. Inform. Kew 1907: 412. 1907.

三蕊兰 san rui lan

Tupistra singapureana Wallich ex Baker, J. Linn. Soc., Bot. 14: 581. 1874; *Neuwiedia balansae* Baillon ex Gagnepain; *N. curtisii* Rolfe; *N. zollingeri* H. G. Reichenbach var. *singapureana* (Wallich ex Baker) de Vogel.

Plants 40–50 cm tall. Rhizome ca. 10 cm, 1–1.5 cm in diam., nodes with slightly lignified proplike roots. Stem short. Leaves many, nearly tufted toward base of stem; blade lanceolate to oblong-lanceolate, $25-40 \times 3-6$ cm, abaxially with conspicuous convex veins, margin membranous, apex long acuminate; petiole-like base 5–10 cm. Rachis 6–8 cm, 10–75-flowered, glandular pubescent; floral bracts ovate to ovate-lanceo-

late, 1–1.5 cm, outer surface glandular pubescent especially on veins. Flowers with ovary elliptic, sparsely glandular pubescent. Sepals white or buff-ochre, oblong to narrowly elliptic, $15-18 \times$ ca. 4 mm, outer surface glandular pubescent, apex aristate; dorsal sepal usually slightly smaller than lateral sepals. Petals greenish white, obovate to broadly cuneate-obovate, ca. $16 \times 5-6$ mm, outer surface glandular pubescent especially on midvein, apex mucronate; lip similar to petals but with a thickened midvein. Column suberect; anthers linear, 5–6 mm, with 2 unequal locules at base; central stamen with a long, slender, costate filament ca. 8 mm; lateral stamen with flat, costate filaments, ca. 3.5×0.7 mm; style ca. 7 mm. Fruit orange to red. Fl. May–Jun.

Forests; ca. 500 m. Hainan (Baoting, Ding'an), Hong Kong, SE Yunnan (Hekou) [Indonesia, Malaysia, Singapore, Thailand, Vietnam]. Flora of China 25: 21. 2009.