11. KUHLHASSELTIA J. J. Smith, Icon. Bogor. 4: 1, t. 301. 1910.

旗唇兰属 qi chun lan shu

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

Vexillabium F. Maekawa.

Herbs, terrestrial. Rhizome elongate, creeping, noded, fleshy. Stem ascending, glabrous, leafy. Leaves ovate to subcircular, with a short petiole-like base sheathing stem. Inflorescence erect, pubescent; peduncle green, sometimes tinged with purplish red, with scattered sterile bracts; rachis 1- to many flowered; floral bracts lanceolate, ca. as long as pedicel and ovary, membranous, often pubescent and with ciliate margin. Flowers resupinate, small; ovary twisted, glabrous to pubescent. Sepals adaxially glabrous to pubescent; lateral sepals connate along inner margin for up to half their length, forming a tube and enclosing hypochile. Petals membranous, upper margin adnate to dorsal sepal and forming a hood; lip longer than sepals, attached at base to column margin, 3-partite; hypochile a shallowly bilobed sac, sometimes septate, containing 2 oblong appendages; mesochile elongate, margin involute, sub-tubular, with a fleshy flange along exterior margin on each side; epichile dilated, flabellate, obcordate to transversely oblong, entire or bilobed. Column erect, stout, basally dilated; anther on ventral side of column, ovoid, 2-locular; pollinia 2, clavate, each longi-tudinally parted, granular-farinaceous, sectile, with short caudicle, attached to a solitary viscidium; rostellum at column apex, erect, 2-lobed; stigma lobes connate, at base of rostellum.

About ten species: Indonesia, Malaysia, New Guinea, and the Philippines, north to China, Japan, and Korea; one species in China.

Recent analyses of the Goodyerinae by Ormerod (Lindleyana 17: 189–238. 2002) and Pridgeon et al. (Gen. Orchid. 3: 63–153. 2003) have concluded that *Vexillabium* and *Kuhlhasseltia* are congeneric.

1. Kuhlhasseltia yakushimensis (Yamamoto) Ormerod, Lindleyana 17: 209. 2002.

旗唇兰 qi chun lan

Anoectochilus yakushimensis Yamamoto, Bot. Mag. (Tokyo) 38: 131. 1924; Cystopus humilis Fukuyama; Kuhlhasseltia integra (Fukuyama) T. C. Hsu & S. W. Chung; Pristiglottis humilis (Fukuyama) Fukuyama; P. integra Fukuyama; P. yakushimensis (Yamamoto) Masamune; Vexillabium humilum (Fukuyama) S. S. Ying; V. integrum (Fukuyama) S. S. Ying; V. yakushimense (Yamamoto) F. Maekawa.

Plants 8–15 cm tall. Rhizome branching, pubescent. Stem ascending, green. Leaves subrosulate at base of stem or spaced along stem, green, tinged with reddish purple, ovate, $0.8-5 \times 0.6-2.5$ cm, fleshy, 3-veined, base rounded, margin sometimes minutely toothed, apex acute; petiole-like base 5–15 mm. Inflorescence often purplish red, 4–8 cm, white pubescent, with 1–3 pinkish red sterile bracts; rachis pinkish, 1.5–4.5 cm, 2–7-flowered, sparsely pubescent; floral bracts purplish red, broadly lan-

ceolate, 5–6 mm, abaxially sparsely pubescent, margin ciliate, apex acuminate. Flowers small; ovary slightly curved, cylindric-fusiform, 7–8 mm including pedicel, glabrous to pubescent. Sepals green at base, whitish pink toward apex; dorsal sepal shortly connate to lateral sepals at base, erect, oblong-ovate, concave, 3.5-4.5 mm, 1-veined, apex obtuse; lateral sepals oblong, falcate, $5-6 \times ca. 2$ mm, 1-veined, apex obtuse. Petals ovate, falcate, $4-5 \times 1.5-2.5$ mm, apex obtuse-apiculate; lip white, ca. 8 mm; hypochile saccate, containing 2 appendages; mesochile with 2 usually dentate flanges; epichile divergently 2-lobed, $3-4 \times 4.5-5$ mm. Column 2–3 mm; anther cordate, ca. 1.4 mm, apex acuminate; pollinia obovoid, attached to triangular viscidium; rostellum erect, furcately 2-lobed, lobes unequal in size. Fl. Aug–Sep. 2n = 26.

Forests, rocky crevices, along streams; 400–1600 m. Anhui, Hunan, Shaanxi, Sichuan, Taiwan, Zhejiang [Japan, Philippines].

The S Taiwan (Lan Yu) endemic *Pristiglottis integra* has a pubescent ovary but in other character states overlaps with *Kuhlhasseltia yakushimensis*. Flora of China 25: 63. 2009.