

## 8. Four New species of Genus *Sedum* (Crassulaceae) from Taiwan

### *A. Sedum cirenianum* S.S. Ying

*Sedum cirenianum* S.S. Ying, *sp. nov.* 慈恩佛甲草

TYPE: TAIWAN. Hualien county, Xiulin Township (秀林鄉), Ciren (慈恩) 1995 m alt. *S. S. Ying*, *s.n.* October 24, 2020 ° (holotype, NTUF) °



Fig. 108. *Sedum cirenianum* S. S. Ying, the plant

**Morphology** : Perennial herbs, rhizome absent; fibrous roots slender; stem simple to branched upward, 8-15 cm long, ascending to pending, fleshy, green, glabrous; branches 4-9 cm long, fleshy, green to pale green, glabrous. Leaves dimorphic, the lower ones alternate, opposite to 4-5-verticillated at branched point; spatulate, remote, 6-8 mm long, 4-6 mm wide, about 1.5 mm thick, obtuse at apex, attenuate at base, entire at margins, lustrous green surface and pale green beneath, glabrous on both surfaces; midrib and lateral veins inconspicuous on both surfaces; petioles 5-7 mm long, glabrous, pale green; the upper ones, densely arranged, ovate, 4-5.5 mm long, 3.5-4 mm wide, obtuse and with a mucro at apex, attenuate at base, dotted surface, smoothed beneath;



Fig. 109. *Sedum cirenianum* S. S. Ying, lower leaves alternate, opposite and verticillate

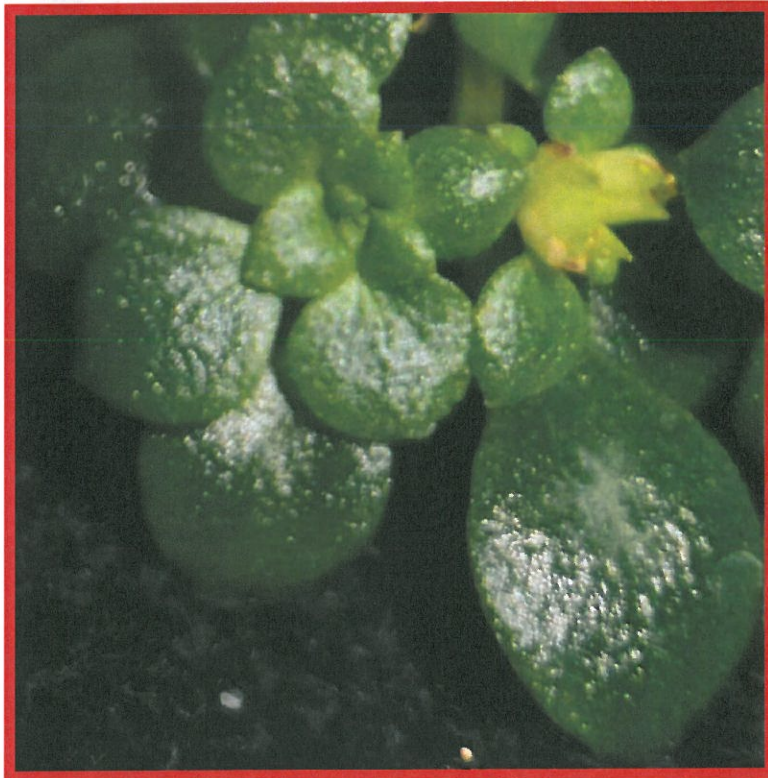


Fig. 110. *Sedum cirenianum* S. S. Ying, densely arranged leaves with dotted leaf-surface



petioles 2-3 mm long, pale green glabrous.

Flowers solitary, terminal on the branched, subtend by densely arranged leaves, 5-6 mm in diameter when opened, sessile; sepals 6, free, smaller, ovate, 2.5-3 mm long, 2-2.5 mm wide, acute at apex, membranous, glabrous; petals 6, lanceolate, 3-4 mm long, 2.5 mm wide, pale yellow and tinged with purplish after anthesis, acuminate at apex, truncate at base; stamens 6, opposited to petals; filaments slender, same length with petals; anthers white to pale yellow, rounded or nearly so, 0.5 mm across; nectar scales opposite, 0.4-0.5 mm across, emarginate at apex; carpels 6, free, connate at base, oblong, 3-4 mm long, glabrous; styles short, 0.8 mm long.

Fruit a follicle, 2.5-4 mm long, opened when mature; seeds numerous, rounded, 0.5 mm across, smooth.



Fig. 111. *Sedum cirenianum* S. S. Ying, the flowers

#### Diagnosis.

*Sedum cirenianum* is characterized by:

1. The only species of genus *Sedum* with 6-merous flowers in Taiwan.
2. Leaves dimorphic, the lower ones alternate, opposite to 4-5 -verticillated at branched point; spatulate.
3. The upper leaves densely arranged, ovate, 4-5.5 mm long, 3.5-4 mm wide, obtuse and with a mucro at apex, attenuate at base, dotted surface.

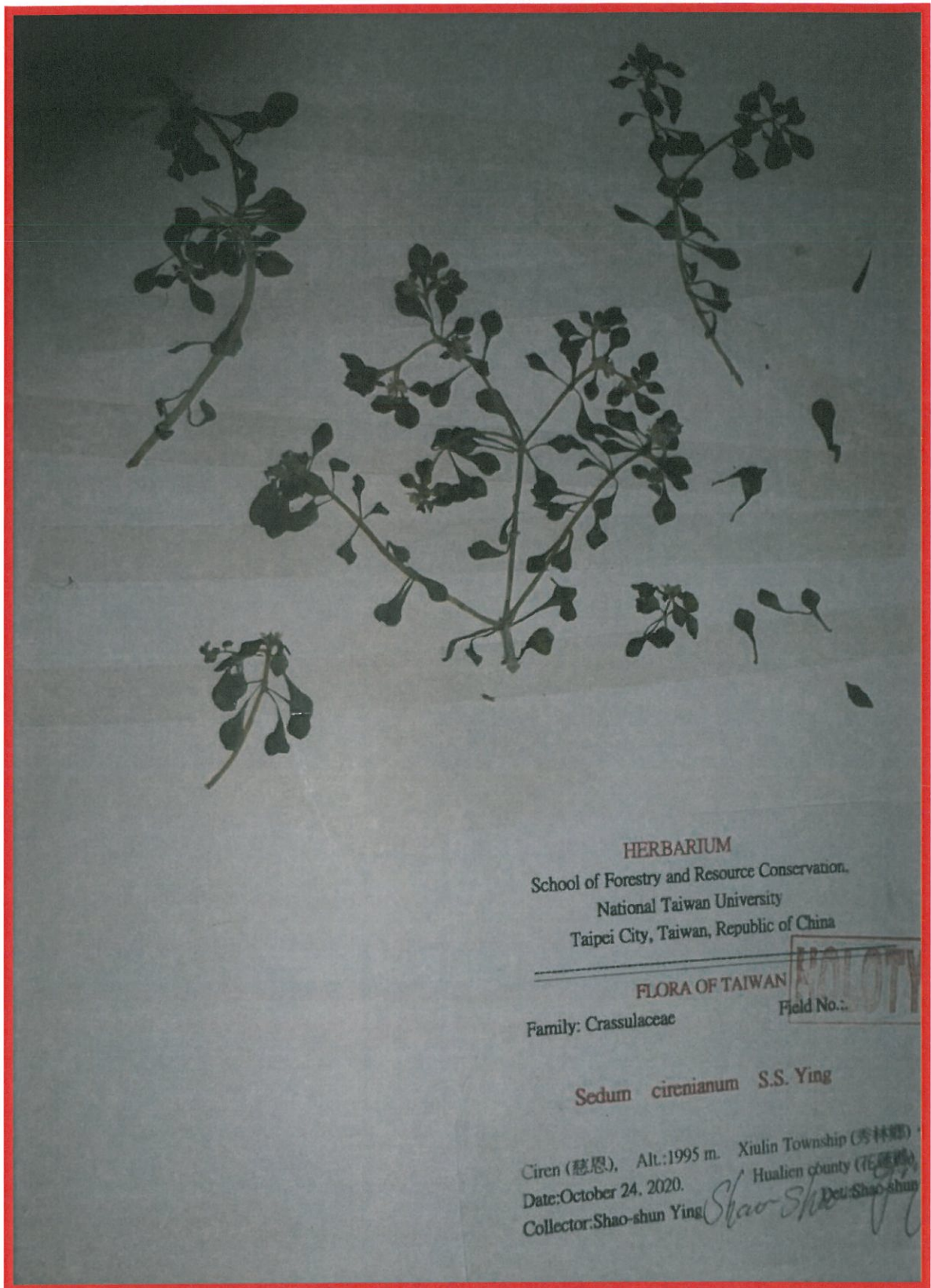


Fig. 112. *Sedum cirenianum* S. S. Ying, the holotype NTUF-110-017.





Fig. 113. *Sedum cirenianum* S. S. Ying, the plant

3. Flowers solitary, terminal on the branched, subtend by densely arranged leaves, 5-6 mm in diameter when opened, sessile.

4. Sepals and petals 6, stamens 6.

**Distribution and phenology.**

*Sedum cirenianum* S.S. Ying is endemic to Taiwan. It is known from Ciren (慈恩) area, about 1995 m elevation, Xiulin Township (秀林鄉), on cliff of limestones, Hualien county, Eastern Taiwan. and flowering time from March to May.

