

***Acronema tenerum* (DC.) Edgew. (Umbelliferae), a new genus for Thailand**

PIYAKASET SUKSATHAN*

ABSTRACT. *Acronema tenerum* (DC.) Edgew. is newly recorded for Thailand.

During a field trip in August 1999 with Mr Santi Wattana and Dr George Argent to carry out a survey of Musaceae from Chiang Mai to Mae Hong Son, we passed Doi Inthanon and found out a strange epiphytic umbel. This plant appeared to be similar to *Acronema tenerum* (DC.) Edgew. from China (Shan & Sheh 1985), although the same species recorded from India possesses no calyx teeth and is markedly different from the Chinese plant (Mukherjee & Constance 1993). Specimens and illustrations were sent to Dr Mark Watson at the Royal Botanic Garden, Edinburgh, U.K., who confirmed the identification by matching the material with herbarium specimens from China and the Himalayas.

In Thailand, there are 15 genera and 22 species of Umbelliferae. *Acronema* is an additional new genus to the flora. The key to genera in the Flora of Thailand Umbelliferae account (Hedge & Lamond 1992) is emended as follows:

- 17. Umbels leaf-opposed. Fruits topped with conspicuous sepals to 0.5 mm. Plants of wet places
 - 13. *Oenanthe*
- 17. Umbels not leaf-opposed. Fruits with or without very minute sepals. Plants of dry ground or epiphytic
 - 18. Ultimate leaf segment entire or very minute teeth; petioles with narrow or without a sheathing base
 - 19. Fruits compressed dorsally with winged ridge. Petal white
 - 11. *Seseli*
 - 19. Fruits compressed laterally, ridge obscure or obsolete. Petal red
 - 16. *Acronema*
 - 18. Ultimate leaf segments serrate; petioles with broad sheathing base
 - 12. *Ligusticum*

16. ACRONEMA

Falc. ex Edgew., Trans. Linn. Soc. London 20(1): 51. 1846; Liou & Shan, Acta Phytotax. Sinica 18(2): 194-204. 1980; Liou in Shan & Sheh, Fl. Reipubl. Popul. Sinica 55(2): 113. 1985.

Low or slender, erect, caulescent, usually branching, essentially glabrous to slightly scaberulous perennial herbs from a globose or fusiform tuberous root. *Leaves* petiolate, membranous, simply ternate or pinnate, to pinnately or ternate-pinnately decomound, the ultimate divisions linear to orbicular; petiole slender, sheathing; caudine leaves reduced upward, the uppermost often sessile, with elongate, entire divisions, or reduced

*Herbarium, Queen Sirikit Botanic Garden, Mae Rim, Chiang Mai 50180, Thailand.

to sheaths. *Inflorescence* of lax, terminal and usually lateral, compound umbels, the peduncles slender. *Involute* lacking, or of an occasional narrow, setaceous bract. *Rays* usually few, rarely more numerous, slender, subequal to unequal, spreading or spreading-ascending. *Involutel* of few short, inconspicuous narrow bracteoles, or lacking. *Umbellets* few or more flowered, the flowers pedicellate. *Flowers* white, pinkish, or purplish-red, all regular; petals linear to ovate, plane and without an inflexed apex, acuminate to longly caudate, subequal; calyx teeth obsolete, rarely evident; stylopodium conical to depressed and forming a thick flattened disk, or obsolete, the styles short to slender, erect to recurved or reflexed. *Pedicels* short to slender, usually unequal. *Fruit* ovoid to oblong-elliptic, compressed laterally, often narrowed at apex, rounded at base, constricted at commissure and sometimes didymous, the mericarps subterete, pentagonal, or a little compressed dorsally in transection, often a little divergent at apex, glabrous, the ribs filiform to obscure or obsolete. *Vittae* usually 2 or 3 (rarely 1) in intervals, 2 on commissure; commissural face plane; carpophore entire, bifid, or bipartite.

Distribution: A genus of ca. 24 species chiefly in the Eastern Himalayan region of China and India, with one species extending to the Western Himalayas.

Acronema tenerum (DC.) Edgew., Trans. Linn. Soc. London 20(1): 51. 1846; Liou in Shan & Sheh, Fl. Reipub. Popul. Sinica 55(2): 119. 1985; Prasanta & Constance, Umbelliferae of India: 127. 1993.—*Helosciadium tenerum* DC., Prodr. 4: 105. 1830.—*Pimpinella tenera* Benth. in Hook.f., Fl. Br. Ind. 2: 686. 1879. Type: Nepal, *Wallich* Cat. 593 (isolectotype K). Figs. 1–2.

Plants slender, erect, 7–15 cm tall, with tuberous root. *Leaves* ovate, sometimes triangular or pentagonal, 4–5 by 3.3–5 mm, bipinnate to tripinnate in the basal leaf; ultimate divisions oblong to oblanceolate or oval, 12–13 by 7.5–12.25 mm, mucronate, apiculate, with 2 rows of minute teeth at margin 0.4–0.5 mm long; petiole slender, up to 4.5 cm long, narrowly sheathing at base; caudine leaves gradually reduced upward. *Inflorescence* with terminal and lateral umbels; peduncles very slender, up to 1.5 cm long. *Flowers*: sepals with 5 conspicuous teeth; petals dark red, linear lanceolate 3.1–17.5–18 by 3.25 mm, with long tailed apex about half of the length, glandular; stylopodium conical, the styles slender, short, erect, recurved in fruit. *Fruit* ovoid, ca. 1.5 mm in diam., narrowed towards apex, rounded at base. *Mericarps* compressed laterally, ribs obscure to obsolete, vittae minute, 2–3.

Thailand.—NORTHERN: Chiang Mai [Doi Inthanon, *Wattana et al.* 608 (E, QBG); Doi Inthanon, *Suksathan* 2281 (BKF, QBG)].

Distribution.—India, Sikkim, China.

Ecology.—Epiphytic on mossy branches or terrestrial on humus rich soil in upper montane rain forest, 2300 m. Flowering August; fruiting October. Plants are dormant during the dry season.

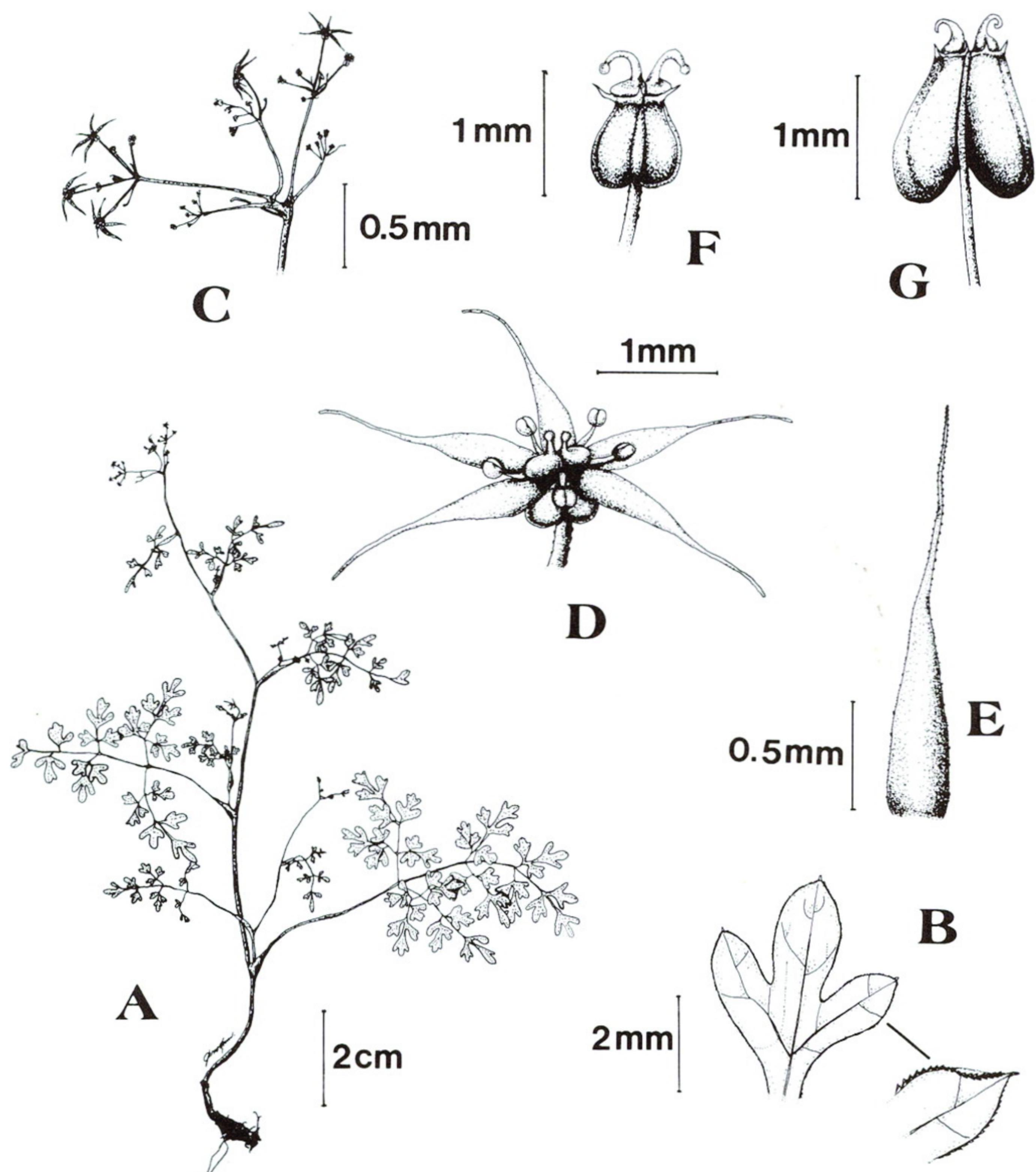


Figure 1. *Acronema tenerum* (DC.) Edgew.: A. habit; B. leave; C. inflorescence; D. flower; E. petal; F. young fruit; G. mature fruit.

ACKNOWLEDGEMENTS

I am very grateful to Dr Mark Watson and Dr George Argent of the Royal Botanic Garden, Edinburgh for kindly checking specimens. I am also grateful to Dr Weerachai Nanakorn and Dr Suyanee Vessabutr for commenting on and editing the manuscript.

REFERENCES

Hedge I.C. & Lamond, J.M. 1992. Umbelliferae. In: Smitinand, T. & Larsen, K. (eds), *Flora of Thailand* 5 (4): 442–470.

Mukherjee, P.K. & Constance, L. 1993. *Umbelliferae of India*. Oxford & IBH Publishing, New Delhi, 279 pp.

Shan, R.-H. & Sheh, M.-L. 1985. Umbelliferae. *Flora Reipublicae Popularis Sinicae* 55: 2. Science Press, 282 pp.

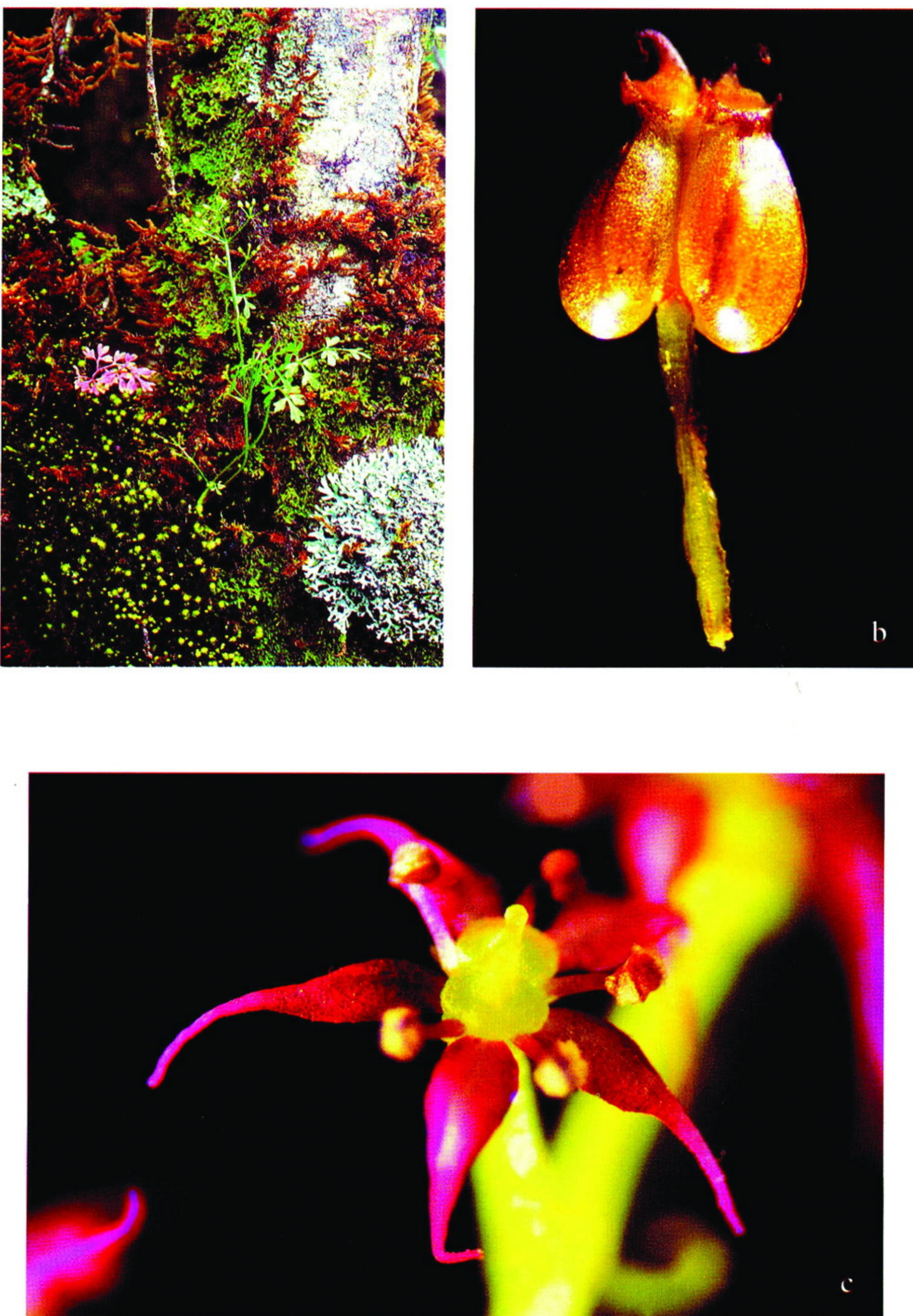


Figure 2. *Acroneema tenerum* (DC.) Edgew.: (a) natural habitat at Doi Inthanon; (b) young fruit 25 \times ; (c) flower 10 \times