

## GENUS *WIJKIA* (SEMATOPHYLLACEAE, BRYOPHYTA) IN THE WESTERN GHATS OF INDIA

R. SREEBHA, K. C. KARIYAPPA and A. E. D. DANIELS\*

Bryology Laboratory, Department of Botany and Research Centre, Scott Christian College,  
Nagercoil-629 003, Tamil Nadu, India; \*E-mail: dulipdaniels@yahoo.co.uk

(Received 30 June, 2016; Accepted 31 July, 2016)

The Asian moss *Wijkia baculifera* (Dixon) H. A. Crum so far known from Northeast India and Myanmar, is added here to the moss flora of Peninsular India from the Western Ghats. A brief description with illustrations and photographic plate is provided.

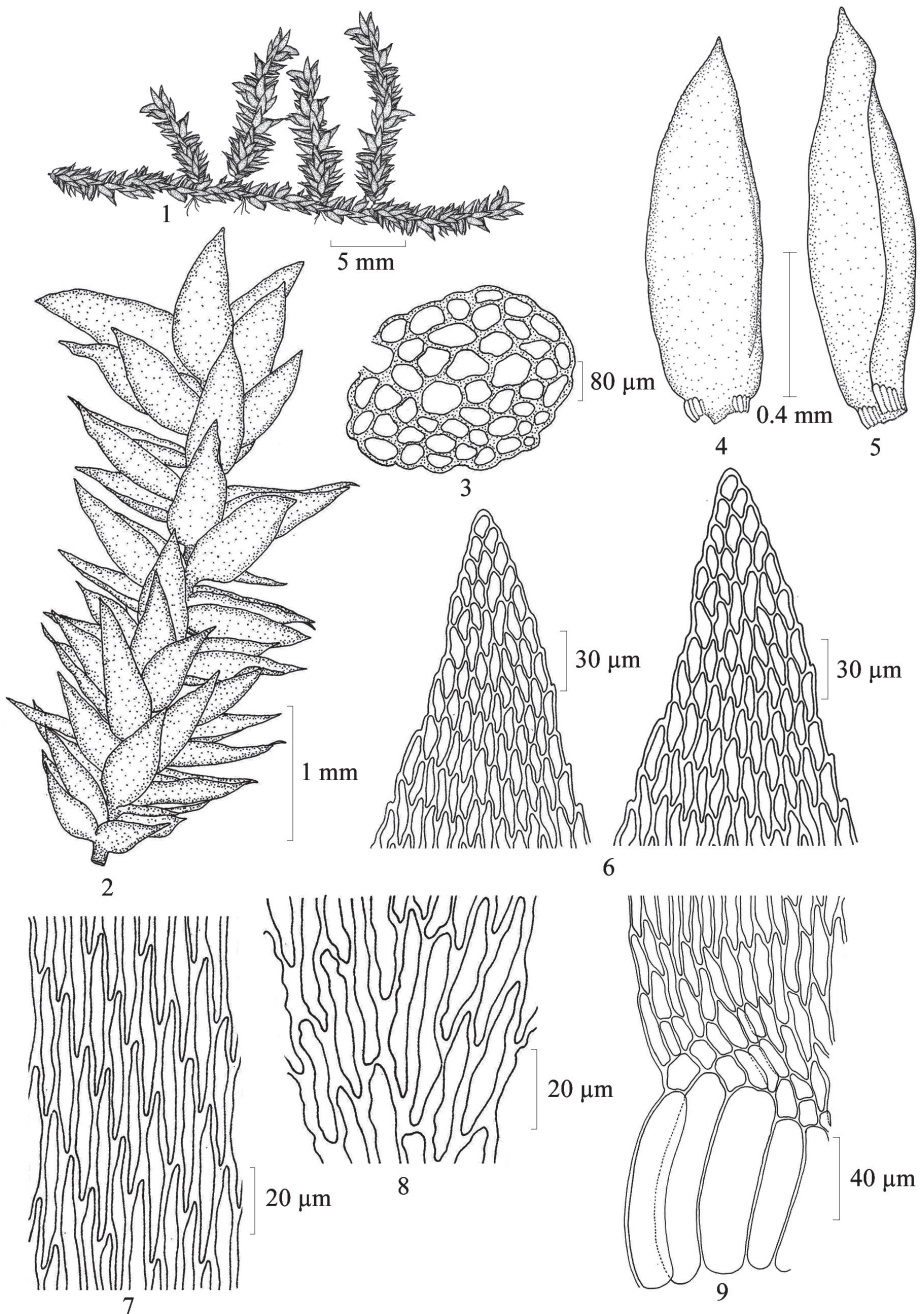
Key words: Anamalais, Western Ghats, *Wijkia baculifera*

### INTRODUCTION

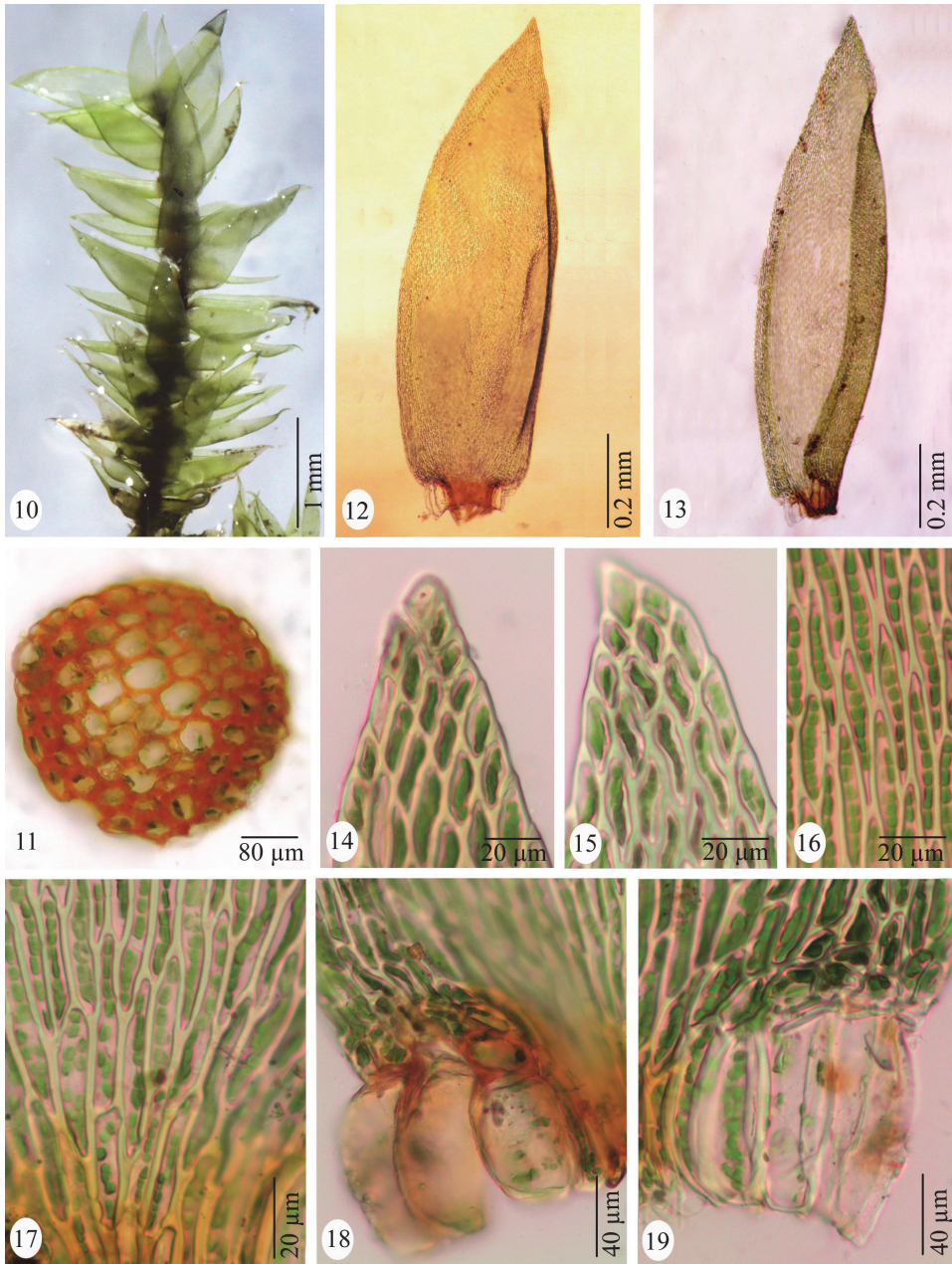
In India, so far 8 species of *Wijkia* H. A. Crum (Sematophyllaceae, Hypnales) have been reported (Lal 2005). Of these, only *W. surcularis* (Mitt.) H. A. Crum and *W. tanytricha* (Mont.) H. A. Crum are known from the Western Ghats (Chaudhary *et al.* 2006, 2008, Manju *et al.* 2008). Investigations carried out in the Indira Gandhi National Park, Anamalais, in the Western Ghats, led to the discovery of one more species, *viz.* *W. baculifera* (Dixon) H. A. Crum, which was first described from Nagaland in Northeast India and later from Burma (Myanmar) (*vide* Gangulee 1980). A brief description with a figure and a key distinguishing the latter from the former are provided.

### Key to the species

- |    |   |                      |
|----|---|----------------------|
| 1a | Leaves subulate at apex                             | 2                    |
| 1b | Leaves acute at apex                                | <i>W. baculifera</i> |
| 2a | Stem leaves oblong-ovate, as large as branch leaves | <i>W. surcularis</i> |
| 2b | Stem leaves ovate, larger than branch leaves        | <i>W. tanytricha</i> |



Figs 1–9. *Wikia baculifera* (Dixon) H. A. Crum – 1 = plant, 2 = a portion enlarged, 3 = cross-section of stem, 4 = stem leaf, 5 = branch leaf, 6 = leaf apical cells, 7 = leaf median cells, 8 = leaf basal cells, 9 = leaf alar cells (Daniels, A. E. D. and Kariyappa, K. C. 9747 p. p.)



Figs 10–19. *Wikkia baculifera* (Dixon) H. A. Crum – 10 = portion of plant, 11 = cross-section of stem, 12 = stem leaf, 13 = branch leaf, 14–15 = leaf apical cells, 16 = leaf median cells, 17 = leaf basal cells, 18–19 = leaf alar cells (photographed from Daniels, A. E. D. and Kariyappa, K. C. 9747 p. p.)

***Wijkia baculifera* (Dixon) H. A. Crum**  
 Bryologist 74: 171 (1971) (Figs 1–19)

Chopra, R. S., Taxon. Indian Moss., p. 502 (1975); Gangulee, Moss. E. India 3(8): 1863, f. 945 (1980); Lal, J., Checklist Indian Moss., p. 141 (2005).

Basionym: *Acanthocladium baculiferum* Dixon, J. Bombay Nat. Hist. Soc. 39: 791 (1937). – Type: India, Naga Hills, Japwo, ca 2,750 m. Coll.: Bor, N. L. 309, 27 November, 1935 (BM).

Plants caespitose, robust, glossy, yellow-green. Stems creeping, 0.7–2 cm long, pinnately branched, ca 0.32 × 0.24 mm, ovate, without a central strand; cortical cells 1- or 2-layered, 10–14 × 8–12 mm, elongate-hexagonal, thick-walled; medullary ones 16–28 × 14–24 mm, rounded-quadrate to hexagonal, thin-walled. Stem leaves imbricate, erectopatent, 1–1.5 × 0.4–0.5 mm, concave, oblong, acute at apex, faintly crenulate at apical margin, ecostate; branch leaves imbricate, erectopatent, 1–1.3 × 0.5–0.6 mm, concave, oblong, acute at apex, faintly crenulate at apical margin, ecostate; apical cells 10–20 × 4–6 mm, linear-rhomboid; median ones 38–48 × 4–6 mm narrow, elongate-rhomboid; basal ones 14–44 × 4–8 mm, rectangular; alar cells differentiated by 3 to 5 large 72–82 × 16–24 mm tinted cells. Sporophyte not seen.

Habitat: Corticolous on *Calophyllum polyanthum* Wall. ex Choisy (Clusiaceae), in evergreen forests, ca 820 m.

Distribution: Myanmar and India: Northeast India (Nagaland) and Western Ghats of Tamil Nadu (Coimbatore).

Specimen examined: W Ghats: Tamil Nadu, Coimbatore Dist., Topslip (Karian shoal). ca 820 m a.s.l. Coll.: Daniels, A. E. D. and Kariyappa, K. C. (9747 p.p.), 24.09.2014 (SCCN).

\*

*Acknowledgements* – We thank the Tamil Nadu State Forest Department for permission to explore the study area. AEDD thanks the Department of Science and Technology (DST), New Delhi, for financial assistance and the Principal, Scott Christian College, for facilities.

## REFERENCES

- Chaudhary, B. L., Sharma, T. P. and Bhagora, F. S. (2008): *Bryophyte flora of North Konkan: Maharashtra (India)*. – Himanshu Publ., New Delhi, India, 326 pp.
- Chaudhary, B. L., Sharma, T. P. and Sanadhya, C. (2006): *Bryophyte flora of Gujarat (India)*. – Himanshu Publ., New Delhi, India, 197 pp.
- Chopra, R. S. (1975): *Taxonomy of Indian mosses*. – CSIR, New Delhi, India, 631 pp.
- Crum, H. A. (1971): Nomenclatural changes in the Musci. – *Bryologist* 74: 165–174.
- Gangulee, H. C. (1969–1980): *Mosses of Eastern India and adjacent regions*. 1–3 (Fasc. 1–8). – Calcutta, India, 2142 pp.
- Lal, J. (2005): *A checklist of Indian mosses*. – Bishen Singh Mahendra Pal Singh, Dehra Dun, India, 164 pp.
- Manju, C. N., Rajesh, K. P. and Madhusoodanan, P. V. (2008): Checklist of the bryophytes of Kerala, India. – *Trop. Bryol. Res. Rep.* 7: 1–24.