

Tectaria remotipinna (Tectariaceae), a new record for ThailandSTUART LINDSAY¹, DAVID J. MIDDLETON¹ & PIYAKASET SUKSATHAN²

During the course of the Ferns of Thailand, Laos and Cambodia project (see Lindsay & Middleton, 2012 onwards) collecting efforts in various parts of Thailand, accompanied by herbarium studies, have already revealed several new species and new records for Thailand (Lindsay & Middleton, 2009; Lindsay et al., 2008, 2010, 2012a, b; Suksathan et al., 2010). Further work has shown that two collections of a species of *Tectaria* from Chiang Mai Province are a new record for Thailand of *Tectaria remotipinna* Ching & Chu H.Wang. This addition brings the number of currently recognised *Tectaria* species in Thailand to 30 (Lindsay & Middleton, 2012 onwards). *Tectaria remotipinna* is most readily recognised by the swollen stipe bases that are covered with stiff spine-like scales. It was previously only known from Yunnan Province in China.

Tectaria remotipinna Ching & Chu H.Wang, Acta Phytotax. Sin. 19(1): 129. 1981; S.H.Wu & Chu H.Wang, Fl. Reipubl. Popularis Sin. 6(1): 71, pl. 11. 1999. Type: China, Yunnan, Jingdong, Wuliang Shan, April 1954, W.X. Xu 59 (holotype **PE**). Fig. 1.

Terrestrial fern. *Rhizome* very short creeping to erect, to 25 cm tall, and to 3.5 cm diameter at crown; scales bicoloured, dark brown in centre, paler brown at margin and tip, entire. *Stipe* polished, brown, sometimes green above, 35–56 cm long, distinctly swollen and with stiff spine-like scales at base, these scales 6–10 mm long, 0.8–1.4 mm wide, slightly arching downwards, scales above the swollen base slightly smaller and less stiff; stipe and rachis not grooved. *Lamina* deltoid-ovate, 48–114 x 36–144 cm, tripinnatifid at base, dull pale green above, hardly paler beneath, texture soft, minutely and densely hairy above except on veins,

more or less glabrous beneath, margin hairy; free pinnae 4–7 pairs, (sub)opposite, long-stalked, basal pinnae largest, 22–36 x 14–24 cm, asymmetrical with basiscopic pinnules longer, 10–12 cm between basal and second pinnae, other pinnae also remote but less so; costae not grooved; veins copiously anastomosing with large costal and costular areoles, these with or without included simple veinlets. *Sori* terminal on included veinlets, slightly sunken, position indicated by raised lamina above; indusia large, horseshoe-shaped to reniform, each with a distinct central cavity, glabrous, persistent; sporangia not setiferous.

Thailand.— Chiang Mai [Chom Tong, Doi Inthanon National Park, 2 km to Ban Khun Wang, 1450 m altitude, 18° 37' 9" N, 98° 30' 51" E, 20 Sept. 2009, *Middleton, Lindsay & Suksathan 4929* (**E, QBG**); Mae Chaem, Doi Pha Ti Do, on slope in moist shady area near stream, 1400 m altitude, 18° 45' 14" N, 98° 6' 54" E, 22 Sept. 2009, *Middleton, Lindsay & Suksathan 4957* (**E, QBG**)].

Ecology.— Terrestrial on streambanks in lower montane or hill evergreen forest over granite bedrock at 1000–1450 m.

Notes.— We have also seen (but not collected) *Tectaria remotipinna* at Mae Kam Pong waterfalls, in Chiang Mai Province.

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¹ Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh EH3 5LR, Scotland, UK.

² Queen Sirikit Botanic Garden, Mae Rim, Chiang Mai, Thailand.

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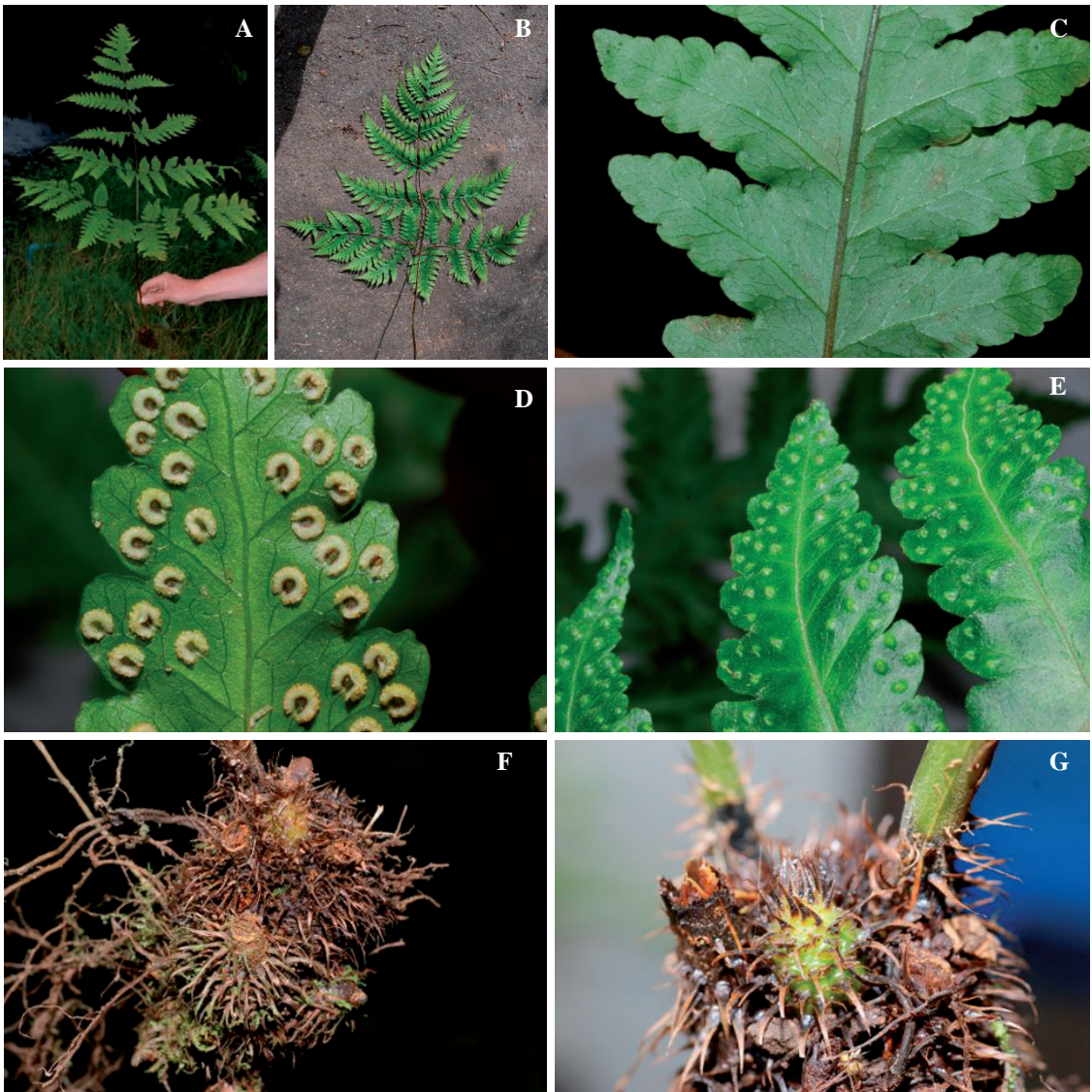


Figure 1: *Tectaria remotipinna*: 1A. frond from above, 1B. frond from below, 1C. sterile lamina from below showing venation, 1D. fertile lamina from below showing sori, 1E. fertile lamina from above showing raised areas corresponding to the position of sori below, 1F. rhizome showing spiny stipe bases (old), 1G. rhizome showing a young spiny outgrowth that will become the base of new frond. 1A, 1C, 1F. *Middleton et al.* 4929; 1B, 1D, 1E, 1G *Middleton et al.* 4957. All photographs by David Middleton.