

Rhizome stout, horizontal, ascending at apex; scales thin, entire, pale brown, ovate. Stipes 2-5 cm long, tufted, stramineous, scaly, densely so near base; lamina narrowly lanceolate, pinnate, 5-20 cm long, 1-3 cm wide; pinnae patent, petiolate, auricled on acroscopic side, 1-3 lower pairs slightly shortened, deflexed; margins serrate to crenate. Sori oblong to reniform, in one row on either side of costa except on auricle; indusia reniform, crossing a veinlet.

Distributed in Japan and Taiwan.


Rhizome prostrate; scales pale brown, lanceolate, hair-pointed. Stipes stramineous, grooved, 25-40 cm long; lamina lanceolate, bipinate to tripinnatifid, apex pinnatifid, gradually narrowed towards apex or suddenly shortened into an almost terminal pinna; pinnae petiolate, ascending, acuminate, distant, lower pairs 4-6 cm apart; basal pinnae usually opposite; pinnae acute, serrate, cut 1/2 way to costa; rachis and rachillae bearing scattered thin pale linear-lanceolate scales; without spines on upper surface; minutely puberulent on upperside at base of pinnae. All pinnae soriferous; indusia pale brown, erose, linear, curved, J-shaped or narrowly reniform, crossing the veinlets.

Distributed in Manchuria, China, Korea, Japan and Taiwan.

TAIPEI: Wulai, Tsai 1741. TAOYUAN: Peichatienshan, Tsai 4402. NANTOU: Hoshe, Sasaki s. n. 1932; Sanlinchi, *Shieh & Tsai* 6530.


Rhizome erect or ascending, stout, covered with stipe bases; scales brown, lanceolate-attenuate, entire. Stipes 8-15 cm long, stramineous, scaly at base; lamina lanceolate, bipinnate; pinnae lanceolate, 3-12 cm long, subsessile, widely patent; lower pinnae opposite, upper pairs usually alternate; pinnalesw 5-10 mm long, oblong, obtuse, serrate-dentate; rachillae narrowly winged, sparsely scaly beneath, scales linear-lanceolate; upper surface with spine-like processes along margins of rachilla grooves, puberulent in rachis groove; basal pinnae shortened, sometimes deflexed; veins dark and conspicuous on underside. Sori medial on veinlets; indusia oblong, often curved or J-shaped and crossing a veinlet.

Distributed in Taiwan and the Philippines.