

SCHIZAEACEAE

莎草蕨科 suo cao jue ke

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Plants terrestrial. Fronds simple (linear) or fan-shaped, variously cleft and with dichotomous free veins. Sporangia on marginal, elaminate, branched or unbranched projections at lamina tips, not in discrete sori, exindusiate; spores bilateral, monolete, 128–256 per sporangium; gametophytes green and filamentous (*Schizaea*), or subterranean and non-green, tuberous (*Actinostachys* Wallich). Base chromosome numbers: $x = 77, 94, 103$.

Two genera and ca. 30 species: pantropical; one genus and two species in China.

Ching Ren-chang, Fu Shu-hsia, Wang Chu-hao & Shing Gung-hsia. 1959. Schizaeaceae. *In*: Ching Ren-chang, ed., *Fl. Reipubl. Popularis Sin.* 2: 114–115.

1. SCHIZAEA Smith, *Mém. Acad. Roy. Sci. (Turin)* 5: 419. 1793, nom. cons.

莎草蕨属 suo cao jue shu

Plants evergreen, small. Rhizome siphonostelic, creeping or suberect, covered with septate hairs. Fronds linear and grasslike, or dichotomously branched and fan-shaped. Sporangia borne in 2–4 rows on extended fertile sporophores; spores monolete; gametophytes filamentous, algae-like.

More than 20 species: mainly in the tropics; two species in China.

- 1a. Fronds fan-shaped, several times dichotomously divided, with 5–10 fertile lobes at apex 1. *S. dichotoma*
1b. Fronds simple, linear, entire, except for 5–15 fertile lobes digitately placed at apex 2. *S. digitata*

1. *Schizaea dichotoma* (Linnaeus) Smith, *Mém. Acad. Roy. Sci. (Turin)* 5: 422. 1793.

分枝莎草蕨 fen zhi suo cao jue

Acrostichum dichotomum Linnaeus, *Sp. Pl.* 2: 1068. 1753;
Schizaea biroii V. A. Richter; *S. kikuzatonis* M. Ogata.

Rhizome shortly creeping, bearing 1 or 2(–5) erect fronds; hairs on rhizome and stipe bases multicellular, brown to pale brown, ca. 3 mm. Fronds fan-shaped; undivided portion 20–50 cm; stipe not winged and barely distinct from winged portion or lamina, sparsely hairy; upper portion 2–8 times dichotomously divided, lamina-like with lobes 1–1.5 mm wide; whole lamina 10–30 × 7–20 cm, somewhat variable in size. Sporangium-bearing lobes 5–10 pairs arranged pinnately at apex of ultimate frond lobes, lowest ones largest, 3–4 mm; sporangia in 2 regular rows on lobes, with long brown paraphyses.

Dry forest floors in lowlands. Hainan, S Taiwan [India, S Japan, Myanmar, Thailand; widely distributed in palaeotropics, Australia, and Pacific islands].

Plants from Taiwan and the Ryukyu Islands have been treated as a distinct species, but it is difficult to distinguish a local form of this widely distributed, variable species.

2. *Schizaea digitata* (Linnaeus) Swartz, *Syn. Fil.* 150, 380. 1806.

莎草蕨 suo cao jue

Acrostichum digitatum Linnaeus, *Sp. Pl.* 2: 1068. 1753;
Actinostachys boninensis Nakai; *A. digitata* (Linnaeus) Wallich.

Rhizome shortly creeping, bearing several erect fronds; hairs on rhizome and stipes multicellular, brown, ca. 2 mm. Fronds crowded, linear, 20–30 cm tall, with indistinct stipes, simple and entire except for apical soriferous portion, 2–3.5 mm wide, with distinct midrib, recurved when dry, basal 2–5 cm portion resembling stipe, triangular in cross section; apex of vegetative portion of fronds constricted, bearing 5–15 soriferous lobes digitately. Soriferous lobes 2–4 cm × ca. 1 mm, entire; sporangia covering whole abaxial surface of soriferous lobes, without paraphyses.

Forming small populations on rather dry forest floors in lowlands. Guangdong, Hainan, Taiwan, Yunnan [India, S Japan, Myanmar, Thailand, Vietnam; widely distributed in palaeotropics from Madagascar to Polynesia].

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