

• 中文名稱：小毛蕨

• 英文名稱：Acuminate Cyclosorus

• 學名：  
*Cyclosorus acuminatus* (Houtt. ) Nakai  
*Cyclosorus acuminatus* (Houtt. ) Nakai ex H.Ito  
*Christella acuminata* (Houtt.) Lev.

• 科名：金星蕨科(Thelypteridaceae)小毛蕨屬(Cyclosorus)

小毛蕨，毛蕨、金星草，漸尖毛蕨（中國主要植物圖說，蕨類植物門），尖羽毛蕨（海南植物志）小毛蕨（臺灣植物志，第一版），毛蕨（臺灣植物志，第二版）

• **Standard English Names:**

- Downy Maiden Fern
- Soft Fern
- Binate Spleenwort

• 別名：

• **Regional & Descriptive Names:**

- **Xiao-mao-jue (小毛蕨):** Small Hairy Fern (*Commonly used in Flora of Taiwan*)
- **Mao-jue (毛蕨):** Hairy Fern (*Flora of Taiwan, 2nd Ed.*)
- **Jin-xing-cao (金星草):** Venus Herb / Golden Star Herb
- **Jian-jian-mao-jue (漸尖毛蕨):** Tapering Hairy Fern (*Key Plants of China: Pteridophyta*)
- **Jian-yu-mao-jue (尖羽毛蕨):** Sharp-pinna Hairy Fern (*Flora of Hainan*)

• 原產地：

中國大陸、日本、琉球、中南半島及台灣均有分布。

**Distributed across Mainland China, Japan, the Ryukyu Islands, Indo-China, and Taiwan.**

• 分佈：

台灣除了高山以外，低海拔地區，生長在林緣或平野潮濕環境。

**Widespread in low-altitude regions across Taiwan, with the exception of high mountains. It typically grows at forest edges or in moist environments on the plains.**

1. 園藝造景植栽：植株造型清新，橫走的根莖部位粗肥，讓崖壁邊坡更添綠意，令人驚豔。2.藥用：效用：全草：清熱。

• 用途：

1. **Horticultural and Landscape Planting (園藝造景植栽):** The plant features a fresh and clean appearance. Its thick, fleshy, creeping rhizomes add vibrant greenery to cliffside slopes and embankments, creating a stunning visual effect.
2. **Medicinal Uses (藥用):**
  - **Functions (效用):** The whole herb (全草) is used to **clear heat (清熱)**.

植株高 70~80 公分。根狀莖長而橫走，粗 0.2~0.4 公分，深棕色，老則變褐棕色，先端密被棕色披針形鱗片。

• 莖：

**The plant stands 70–80 cm tall. The rhizomes are long and creeping, measuring 0.2–0.4 cm in thick. They are deep brown in color, turning brownish-brown (darker brown) as they age. The tips are densely covered with brown, lanceolate scales.**

葉二列遠生，相距 4~8 公分；葉柄長 30~42 公分，基部粗 0.15~0.2 公分，褐色，無鱗片，向上漸變為深禾稈色，略有一二柔毛；葉片長 40~45 公分，中部寬 14~17 公分，長圓狀披針形，先端尾狀漸尖並羽裂，基部不變狹，二回羽裂；羽片 13~18 對，有極短柄，斜展或斜上，有等寬的間隔分開（間隔寬約 1 公分），互生，或基部的對生，中部以下的羽片長 7~11 公分，中部寬 0.8~1.2 公分，基部較寬，披針形，漸尖頭，基部不等，上側凸出，平截，下側圓楔形或近圓形，羽裂達 1/2~2/3；裂片 18~24 對，斜上，略彎弓，彼此密接，頂羽片最長，約 0.8~1.0 公分，披針形，下側一片長不及 0.5 公分，第二對以上的裂片長 0.4~0.5 公分，近鐮狀披針形，尖頭或驟尖頭，全緣。葉脈下面隆起，清晰，側脈斜上，每裂片 7~9 對，單一（基部下側一片裂片有 13 對，多半二叉），基部一對出自主脈基部，其先端交接成鈍三角形網眼，並自交接點向缺刻下的透明膜質連線伸出一條短的外行小脈，第二對和第三對的上側一脈伸達透明膜質連線，即缺刻下有側脈 2 又 1/2 對。葉堅紙質，乾後灰綠色，除羽軸下面疏被針狀毛外，羽片上面被極短的糙毛。

• 葉：

這段關於「小毛蕨」葉片的描述非常詳盡，包含了植物分類學中對於葉序、脈相（Venation）及毛感（Indumentum）的專業鑑定特徵。翻譯如下：

**The fronds are distichous (arranged in two rows) and widely spaced about 4–8 cm apart. The petioles (stipes) are 30–42 cm long, with a base thickness of 0.15–0.2 cm; they are brown and scalesless at the base, turning deep straw-colored (stramineous) upward, with occasional fine soft hairs. The lamina (leaf blade) is 40–45 cm long and 14–17 cm wide at the mid-section,**

oblong-lanceolate in shape, with a caudate-acuminate (tail-like tapering) and pinnatifid apex. The base does not narrow, and the blade is bipinnatifid.

There are 13–18 pairs of pinnae, which have very short stalks and are spread diagonally or obliquely upward. They are separated by equal intervals (about 1 cm wide) and are arranged alternately, though the basal pairs may be opposite. Pinnae below the mid-section are 7–11 cm long and 0.8–1.2 cm wide at the center, broadening at the base. They are lanceolate with acuminate tips; the base is asymmetrical, with the upper side protruding and truncate, while the lower side is rounded-cuneate or nearly circular. The pinnae are pinnatifid to 1/2 or 2/3 of their width.

There are 18–24 pairs of segments, which are oblique and slightly curved (arcuate), closely spaced together. The uppermost segments are the longest, about 0.8–1.0 cm, while the lowermost ones on the trailing side are less than 0.5 cm. Segments above the second pair are 0.4–0.5 cm long, sub-falcate lanceolate, with acute or abruptly pointed tips and entire margins.

The veins are raised and distinct on the underside; lateral veins are oblique, with 7–9 pairs per segment and typically simple (unforked), except for the basal-most upper segment which has 13 pairs that are mostly forked. The basal pair of veins originates from the base of the costule and meets at their tips to form an obtuse-triangular areole (mesh), from which a short excurrent veinlet extends toward the sinus membrane. The second pair and the upper vein of the third pair reach the sinus membrane, meaning there are 2.5 pairs of lateral veins reaching the sinus. The leaf texture is stiffly papery (chartaceous) and turns grayish-green when dried. Aside from sparse needle-like hairs on the underside of the costae, the upper surface of the pinnae is covered in very short strigose (stiff) hairs.

• 花：

孢子囊群圓形，生於側脈中部以上，每裂片 5~8 對；囊群蓋大，深棕色或棕色，密生短柔毛，宿存。

• 果實：

The sori (spore clusters) are circular and situated above the middle of the lateral veins, with 5–8 pairs per segment. The indusia (protective membranes) are large, deep brown or brown, densely covered with short pubescence (fine hairs), and persistent (remaining attached even after maturity).

地上生，根莖匍匐，強韌，很長，基部被褐色小鱗片。一回羽狀複葉，散生；葉柄長 15~40 公分，被細毛；葉軸被細毛；葉片長 15~40 公分，寬 5~20 公分，倒卵形至披針形，成熟葉片兩側羽片多於 10 對，先端突遽窄縮(有明顯的頂羽片)；羽片長 5~10 公分，寬 1~2 公分，長橢圓形，邊緣鋸齒狀，基部一對鋸齒較大，先端漸尖，葉脈為羽狀游離脈，上下表面均被細毛，相鄰裂片基部有 1~2 對細脈結合，形成小毛蕨脈型，頂羽片有柄，長 5~15 公分，寬 1~2 公分，先端漸尖，支脈單一。孢子囊群圓形，著生在裂片側脈上，孢膜圓腎形，密生短毛。

**Terrestrial fern with long, resilient creeping rhizomes, covered in small brown scales at the base. The fronds are once-pinnate and scattered (widely spaced); the petioles (stipes) are 15–40 cm long and pubescent (covered in fine hairs), as is the rachis. The lamina (leaf blade) is 15–40 cm long and 5–20 cm wide, ranging from obovate to lanceolate in shape. Mature fronds possess more than 10 pairs of lateral pinnae, with an abruptly narrowing apex that features a distinct terminal pinna.**

• 特性：

**Each pinna is 5–10 cm long and 1–2 cm wide, oblong in shape with serrated margins; the basal pair of serrations is notably larger, and the tips are acuminate (gradually tapering). The venation consists of pinnate free veins, with both upper and lower surfaces covered in fine hairs. Notably, 1–2 pairs of veinlets from adjacent segments unite at the base to form the "Cyclosorus-type venation" (小毛蕨脈型). The terminal pinna is stalked, 5–15 cm long, 1–2 cm wide, with an acuminate tip and simple (unforked) secondary veins. The sori (spore clusters) are circular, situated on the lateral veins of the segments, with circular-reniform (kidney-shaped) indusia that are densely covered in short hairs.**