

• 中文名稱： 土牛膝

• 英文名稱： Common Achyranthes , Twotooth Achyranthes Root

• 學名： *Achyranthes aspera* Linn. var. *india* Linn.

• 科別： 莧科(Amaranthaceae)牛膝屬(Achyranthes)

土牛膝、印度牛膝、擦鼻草、撮鼻草、牛掇草、鈍葉土牛膝、紫莖牛膝、台灣牛膝、和牛膝、白啜鼻草、牛膝頭、蔡鼻草、土牛七(台灣)、倒扣草、倒扣筋、倒鉤(勾)草、粗毛牛膝、雞掇鼻、雞骨黃、戀愛草、牛膝、昆明土牛膝

• **The "Ox Knee" Series (牛膝系列):**

- **Native Ox-Knee (土牛膝), Indian Ox-Knee (印度牛膝), Taiwan Ox-Knee (台灣牛膝), Purple-stemmed Ox-Knee (紫莖牛膝).**
- **The Logic:** The nodes (joints) of the stem are swollen and thick, looking exactly like the **knee joints of an ox**. In Taiwan, it is frequently called **Tu-Niu-Qi (土牛七)**.

• **The "Nose/Snuff" Series (鼻子系列):**

- **Nose-rubbing Herb (擦鼻草), Snuff Herb (撮鼻草/白啜鼻草/蔡鼻草/雞掇鼻).**
- **The Logic:** These names come from folk medicine (often in Hokkien/Taiwanese dialect). Historically, the crushed leaves were used to treat nasal congestion or sinus issues, or the pungent scent was used to "clear the nose."

• **The "Hook & Hitch" Series (倒扣/倒鉤系列):**

- **Reverse-hook Grass (倒扣草), Reverse-hook Sinew (倒扣筋), Hooked Grass (倒鉤草).**
- **The Logic:** This describes its **stiff, downward-pointing spikes**. Once the fruit matures, it points backward; if you walk past it, the "hooks" latch onto your clothes and won't let go!

• **The Romantic Metaphor (浪漫系列):**

- **Love Grass (戀愛草):**
- **The Logic:** It's called "Love Grass" not because of its beauty, but because of its

• 別名：

clinginess. Just like a persistent lover, once the seeds stick to you, they are incredibly difficult to peel off!

菲律賓、馬來半島、印度、台灣和琉球等地。

• 原產地：

- Native to the tropical and subtropical regions of Asia, including the **Philippines, Malay Peninsula, India, Taiwan, and the Ryukyu Islands (Okinawa).**

常為木麻黃海岸林之重要林下植物，也常生長於原野、路旁或荒廢地。

• 分佈：

- **Coastal Forests:** It is a key **understory plant** (林下植物) specifically in **Casuarina coastal forests** (木麻黃海岸林). Casuarina trees are the "windbreaks" of Taiwan's coast, and this plant thrives in their shade.
- **Urban & Wild Areas:** It is also commonly found in **open fields** (原野), **roadside verges** (路旁), and **wastelands/abandoned lots** (荒廢地).

1. 食用：ㄅ.嫩莖葉洗淨後，可直接炒食或煮蛋花湯等。 ㄆ.以沸水燙熟後撈起，再拌或蘸調味料食用。2.藥用：性味：全草：苦、辛、寒。效用：全草：其功能為祛瘀止痛，強筋骨，利關節，活血通經，補肝腎，解痙，利尿，降壓，興奮子宮。主治風濕痺腫，腰腿疼痛，跌打損傷，齒齦腫痛，淋疾，經閉，經痛，高血壓。

1. Edible Uses (食用)

- **Method A (ㄅ):** After washing the **tender stems and leaves** (嫩莖葉), they can be **stir-fried directly** (炒食) or used to cook **egg drop soup** (煮蛋花湯).
- **Method B (ㄆ):** They can be **blanched in boiling water** (沸水燙熟), drained, and then eaten with **seasoning or dipping sauces** (拌或蘸調味料).

• 用途：

2. Medicinal Uses (藥用)

In traditional Chinese medicine (TCM), this plant is a go-to for "lower body" health, particularly joints and circulation.

- **Properties (性味):** The **whole herb** (全草) is **bitter** (苦), **acrid** (辛), and **cold** (寒) in nature.
- **Functions (效用):**
 - **Circulation & Pain:** Removes stasis and relieves pain (祛瘀止痛), promotes blood circulation, and regulates menstruation (活血通經).
 - **Structure:** Strengthens bones and sinews (強筋骨) and benefits the joints (利關節).
 - **Organ Support:** Tonifies the liver and kidneys (補肝腎).

- **Physiological:** Acts as an antispasmodic (解痙), diuretic (利尿), and antihypertensive (降壓). It also **stimulates the uterus** (興奮子宮).
- **Indications (主治 - Treatments):**
 - Rheumatic swelling and pain (風濕痺腫), lower back and leg pain (腰腿疼痛).
 - Traumatic injuries/bruises (跌打損傷), swollen and painful gums (齒齦腫痛).
 - Urinary tract issues (淋疾), absence of menstruation (經閉), and menstrual pain (經痛).
 - High blood pressure (高血壓).

一年生或二年生草本，高達 1 公尺。莖直立或披散，堅實，具 4 稜，有分枝，被柔毛，節膨大如膝狀，入秋後地上部分變成暗紅色。

• 莖：

- **Life Cycle:** An **annual or biennial herb** (一年生或二年生草本).
- **Height:** Can grow up to **1 meter tall** (高達 1 公尺).
- **Growth Habit:** The stem is **upright** (直立) or **sprawling** (披散), and it is **sturdy and solid** (堅實).
- **Structure:**
 - It has **four ridges/angles** (具 4 稜), meaning the stem is somewhat square-shaped in cross-section.
 - It is **branched** (有分枝) and covered in **soft pubescence/fine hairs** (被柔毛).
- **The "Signature" Look:** The **nodes are swollen like knee joints** (節膨大如膝狀). This is the key reason for the name "Ox-Knee."
- **Seasonal Color Change:** After autumn begins, the **above-ground parts turn a dark reddish color** (入秋後地上部分變成暗紅色).

單葉對生，具柄；葉片紙質，卵圓形、倒卵形或長橢圓形，長 4~8 公分，寬 4~5 公分，先端急尖或鈍，基部漸窄，全緣，兩面被柔毛，葉脈更密。

• 葉：

- **Arrangement:** **Simple leaves**, arranged **oppositely** (單葉對生), with a **petiole/stalk** (具柄).
- **Texture:** **Papery** in texture (紙質).
- **Shape:** **Oval/ovate** (卵圓形), **obovate** (倒卵形), or **oblong** (長橢圓形).

- **Dimensions:** Typically **4–8 cm long** and **4–5 cm wide**.
- **Apex & Base:** The tip is **acute** (急尖) or **obtuse** (鈍), while the base gradually narrows.
- **Margins & Surface:**
 - The leaf margins are **entire** (全緣—smooth, not serrated).
 - Both surfaces are covered in **soft hairs** (兩面被柔毛), with hairs being denser along the veins.

夏、秋間開淡綠色小花，穗狀花序腋生或頂生，直立，花開放後反折，花冠向下，貼近花軸，故有倒扣草之名；苞片卵形，具長芒，花後反折；苞片淡紅色，披針形，基部具膜質的邊緣；花被 5，披針形；雄蕊 5 個，退化雄蕊與花絲等長，頂端截平狀或細圓齒狀，背面有 1 鱗片，先端呈流蘇狀。

這段描述精彩地解釋了「倒扣草」這個別名的由來，並詳細記錄了它精巧的花部構造。這也是土牛膝最容易辨認的特徵。

以下為**花 (Flowers)** 的詳細翻譯與解析：

• 花：

- **Blooming Season:** Small **pale green flowers** (淡綠色小花) bloom between **summer and autumn** (夏、秋間).
- **Inflorescence (花序):**
 - An **upright spike** (直立穗狀花序) that can be **terminal** (頂生) or **axillary** (腋生).
- **The "Reverse-Hook" Mechanism (倒扣特徵):**
 - After the flowers open, they **reflex** (反折—bend backward).
 - The corolla points **downward**, pressing closely against the flower axis (花軸).
 - **Logic:** This unique downward-pointing habit is why it is called "**Reverse-Hook Grass**" (倒扣草).
- **Bracts (苞片):**
 - The bracts are **ovate** (卵形) and feature **long awns/bristles** (具長芒). They also reflex after flowering.
 - The bracteoles (小苞片) are **pale red** (淡紅色) and **lanceolate** (披針形) with

membranous edges (膜質邊緣) at the base.

- **Perianth (花被):** There are **5 lanceolate segments (披針形花被)**.
- **Stamens (雄蕊):**
 - There are **5 fertile stamens**.
 - The **staminodes (退化雄蕊)** are as long as the filaments.
 - The tips of these staminodes are **truncate (頂端截平)** or **finely denticulate (細圓齒狀)**.
 - Crucially, there is a **scale (鱗片)** on the back with a **fringed/fimbriate tip (先端呈流蘇狀)**.

胞果卵形，長約 0.3 公分。種子具剛毛，會附著於人畜身上，散播繁殖。

• 果實：

- **Type:** An **utricle (胞果)**—a small, bladder-like fruit with a thin wall.
- **Shape:** **Ovoid (卵形)**.
- **Size:** Very tiny, measuring approximately **0.3 cm long (約 0.3 公分)**.
- **The "Hitchhiker" Strategy (傳播機制):**
 - **Bristles:** The seeds/fruits are equipped with **stiff bristles (具剛毛)**.
 - **Adhesion:** These bristles allow the fruit to **attach to the bodies of humans and animals (附著於人畜身上)**.
 - **Dispersal:** By "hitching a ride," the plant effectively **disperses and reproduces (散播繁殖)** far from the parent plant.

• 特性：

多年生草本，高 20~120 公分；根細長，直徑 0.3~0.5 公分，土黃色；莖四稜形，有柔毛，節部稍膨大，分枝對生。葉片紙質，寬卵狀倒卵形或橢圓狀矩圓形，長 1.5~7 公分，寬 0.4~4 公分，頂端圓鈍，具突尖，基部楔形或圓形，全緣或波狀緣，兩面密生柔毛，或近無毛；葉柄長 0.5~1.5 公分，密生柔毛或近無毛。穗狀花序頂生，直立，長 10~30 公分，花期後反折；總花梗具稜角，粗壯，堅硬，密生白色伏貼或開展柔毛；花長 0.3~0.4 公分，疏生；苞片披針形，長 0.3~0.4 公分，頂端長漸尖，小苞片刺狀，長 0.25~0.45 公分，堅硬，光亮，常帶紫色，基部兩側各有 1 個薄膜質翅，長 0.15~0.2 公分，全緣，全部貼生在刺部，但易於分離；花被片披針形，長 0.35~0.5 公分，長漸尖，花後變硬且銳尖，具 1 脈；

雄蕊長 0.25~0.35 公分；退化雄蕊頂端截狀或細圓齒狀，有具分枝流蘇狀長緣毛。胞果卵形，長 0.25~0.3 公分。種子卵形，不扁壓，長約 0.2 公分，棕色。花期 6~8 月，果期 10 月。土牛膝的種子具剛毛，會附著於人畜身上，散播繁殖，所以，有人稱它為「倒勾刺」或「戀愛草」。

- **Growth Habit:** A **perennial herb** (多年生草本), standing **20–120 cm tall**.
- **Root:** Slender and long, **0.3–0.5 cm in diameter**, with an **earthy yellow** (土黃色) color.
- **Stem: Quadrangular** (四稜形/square-shaped), covered in soft hairs (**pubescent**). The **nodes are slightly swollen** (like a knee), and branches grow in **opposite pairs** (分枝對生).
- **Leaves:**
 - **Texture:** Papery (**chartaceous**).
 - **Shape:** Broadly ovate-obovate or elliptic-rectangular, **1.5–7 cm long** and 0.4–4 cm wide.
 - **Details:** The tip is **obtuse (rounded)** with a small **abrupt point** (具突尖); the base is wedge-shaped or rounded. Margins are **entire** or **wavy** (波狀緣). Both sides are densely pubescent or nearly hairless.
 - **Petiole (Stalk):** 0.5–1.5 cm long.

Inflorescence & Flowers (花序與花)

- **Spike:** Terminal and upright, **10–30 cm long**. The flowers **reflex (bend backward)** after blooming.
- **Peduncle (Main Stalk):** Angled, stout, and rigid; densely covered in white, **appressed** (pressed flat) or spreading soft hairs.
- **Flower Details:** Small (**0.3–0.4 cm**), sparsely arranged.
 - **Bracts:** Lanceolate, with long acuminate tips.
 - **Bracteoles (Small Bracts):** **Spine-like** (刺狀), **0.25–0.45 cm long**, rigid, shiny, and often **tinged with purple**. The base has two **membranous wings** that are easily detached.
 - **Perianth:** 5 lanceolate segments that become **hard and sharp-pointed** after

flowering.

- **Stamens:** 0.25–0.35 cm long; **staminodes** (sterile stamens) have **branched, fringed/fimbriate margins** at the tip.

Fruit, Seeds & Phenology (果實與花果期)

- **Fruit:** An **ovoid utricle** (胞果), 0.25–0.3 cm long.
- **Seeds:** Ovoid, **not flattened**, about 0.2 cm long, and **brown**.
- **Season:** Blooms from **June to August**; fruits mature in **October**.