

Triuridopsis*, a new monotypic genus in *Triuridaceae

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Abstract: The new monotypic genus *Triuridopsis* from Peru is described. A key to the genera of *Triuridaceae* worldwide is given.

Studies of neotropical collections of saprophytes revealed the existence of a new genus of *Triuridaceae*, the description of which follows below.

***Triuridopsis* MAAS & MAAS, gen. nov.**

Herba saprophytica dioecia. Flores masculi tepalis 3, antheris monotheceis filamentosis 6, projectura centralis subulataque muniti.

Small, unbranched, glabrous, saprophytic herbs. Rhizomes terete, each node provided with a scale and two terete roots; roots originating endogenously and perforating the rhizome-scale. Leaves one or two per stem, scale-like. Inflorescence a terminal 1–12-flowered raceme. Bracts placed in front of one of the tepals. Pedicels erect, becoming reflexed in male flowers. Tepals valvate. Plants dioecious. Flowers unisexual.

Staminate inflorescence 2–12-flowered. Tepals three (rarely four), patent to reflexed, with a short connate basal part, recurved margins, and a short subapical appendage placed at right angles to the inner surface of the tepal (appendage straight in bud, i.e., not coiled). Stamens six (rarely eight), two of them placed in front of one tepal, anthers monothechal, 2-sporangiate, dehiscing by one horizontal slit, margins of slit recurved, filaments basally connate. Centre of the (staminate) flowers provided with a subulate projection.

Pistillate inflorescence 1–8-flowered. Tepals three, reflexed, with a short connate basal part, recurved margins, and an appendage as in the staminate flowers. Carpels many, free. Ovaries ovoid. Style apical, stigmatic zone indistinct. Fruit an achene (no dehiscence observed in the oldest fruits), apically covered with large swollen cells. Seeds ellipsoid.

This new neotropical genus of the family *Triuridaceae* belongs to the tribe *Triurideae* comprising *Peltophyllum*, *Triuris*, and *Lacandonia* (MAAS & RÜBSAMEN 1986), because it is dioecious, has unisexual flowers, an apical style, and an indehiscent fruit.

It shares two striking characters with members of the genus *Triuris*: subapical appendages attached to the inner surface of the tepals as in *T. hyalina*, and six anthers which are monotheical as in *T. hexophthalma* (Table 1).

Triuridopsis is aberrant from *Triuris* because its anthers are filamented. In tribe *Triurideae* all anthers are sessile except for teratologies. Most striking is, of course, the sterile projection found in the centre of the male flowers, which may perhaps be comparable to the androphore of members of the genus *Triuris*.

***Triuridopsis peruviana* MAAS & MAAS, spec. nova. Fig. 1**

Generis species unica.

Type: Peru. Loreto: Iquitos, Yanomono, about 50 km downstream Río Amazonas, above Río Napo, 3° 30' S – 72° 50' W. 12 July 1987; alt. 100 m s.m.; fl. fr. T. LAESSØE 265 (holotype USM; isotype C: alc.; isotype K: alc.; isotype U: alc. and slides).

Herbs completely white, 8–10 cm high. Rhizome over 5 cm long, scales triangular-ovate to depressed triangular-ovate, 0.5–1.5 mm long and wide, base auriculate, apex acute. Roots to 25 mm long, glabrous. Leaves one or two per stem, ovate-triangular to broadly ovate-triangular, 0.5–2 mm long, 1–1.5 mm wide, base auriculate and somewhat saccate, apex acuminate to acute. Inflorescence a 1–12-flowered raceme to 2 cm long and 1 cm wide. Bracts ovate-triangular to broadly ovate-triangular, 1.5–2 mm long, 0.8–1.8 mm wide, base auriculate and somewhat saccate, apex acuminate. Pedicels 3–6 mm long.

Staminate inflorescence 2–12-flowered, flowers 3.5–4 mm in diam., connate basal part 0.2–0.4 mm long. Tepals three (rarely four), triangular, 1.8–2 × 1.2–1.4 mm, with recurved margins and a subulate 1.4–2.5 mm long subapical appendage. Stamens six (rarely eight), anthers monotheical, 2-sporangiate, 0.3 × 0.2 mm, dehiscing by one horizontal slit, filaments 0.6 mm long. Centre of the (staminate) flowers provided with a subulate projection 1–1.4 mm long.

Pistillate inflorescence 1–8-flowered, flowers 2–2.5 mm in diam., connate basal part 0.2–0.4 mm long. Tepals three, triangular, 1–1.6 × 0.8–1 mm, with recurved margins, and a subulate 3–5 mm long subapical appendage. Carpels 150–200. Ovaries ovoid, 0.6–0.7 × 0.4 mm. Style apical, 0.5–0.6 mm long, stigmatic zone indistinct. Achenes pale yellow, ovoid, 0.5–1 × 0.3–0.5 mm. Seeds ellipsoid, 0.5 × 0.3 mm.

This saprophyte has been found growing in rain forest, on mostly slightly hilly terra firme with scattered clearings, in large flocks in two collection sites. In one place the plantlets have been found associated with the *Burmanniaceae* *Thismia panamensis* (STANDL.) JONKER and *Gymnosiphon divaricatus* (BENTH.) BENTH. & HOOK. F.

Including the new monotypic genus *Triuridopsis* the family *Triuridaceae* now consists of nine genera comprising about 45 species:

Andruris (5 species), *Hyalisma* (1 species), *Lacandonia* (1 species), *Peltophyllum* (2 species), *Sciaphila* (about 30 species), *Seychellaria* (3 species), *Soridium* (1 species), *Triuris* (3 species), and *Triuridopsis* (1 species).

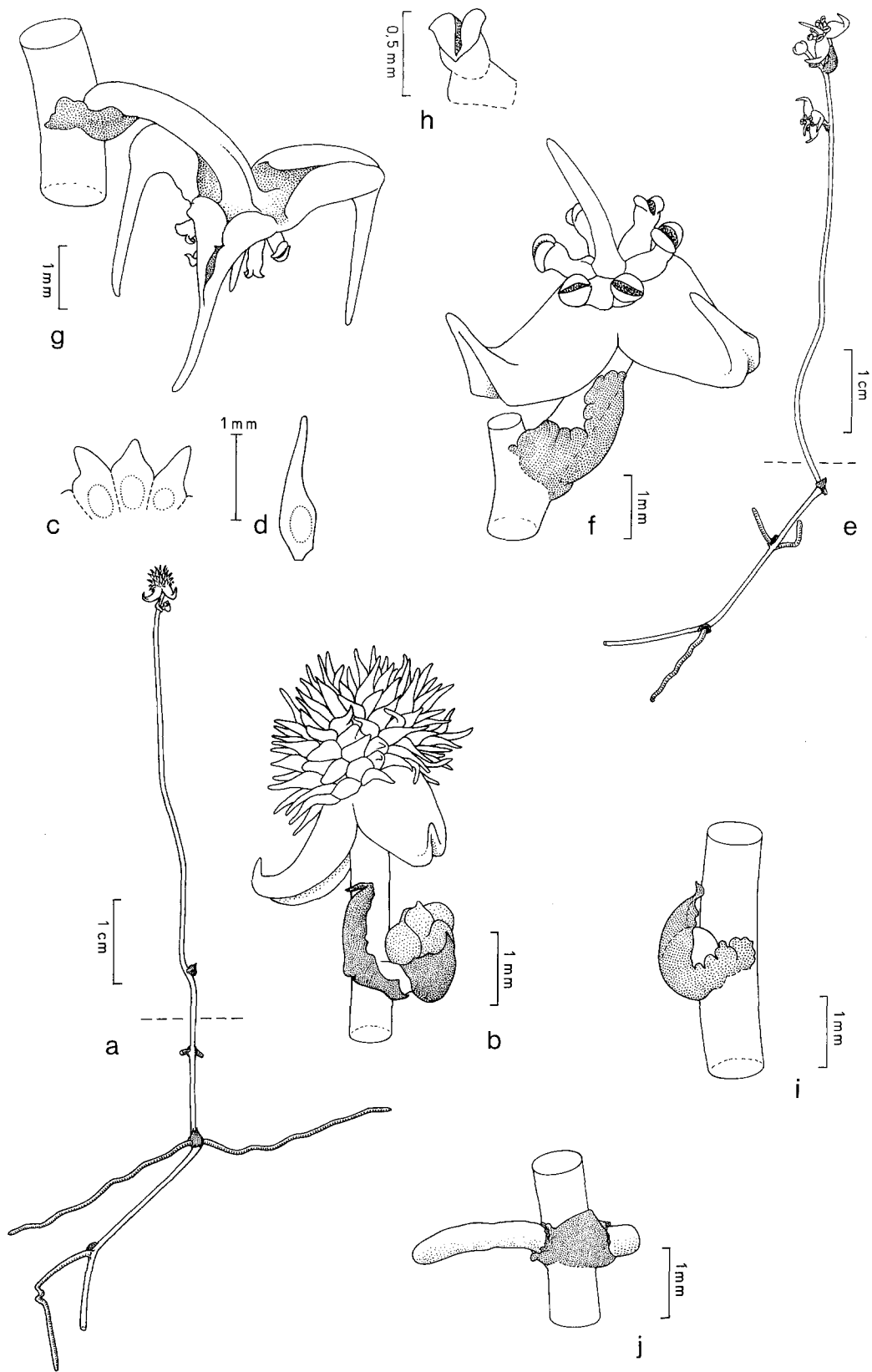


Fig. 1. *Triuridopsis peruviana* (LÆSSØE 265). *a* Habit of pistillate plant, *b* pistillate inflorescence showing one flower and several flower buds, *c* young carpels, *d* older carpel, *e* habit of staminate plant, *f* young staminate flower with erect pedicel, *g* older staminate flower with reflexed pedicel, *h* detail of dehiscing stamen, *i* node of stem showing leaf enveloping bud, *j* node of rhizome showing endogenous roots perforating scale

As a result of a study of many data of all genera of *Triuridaceae* (RÜBSAMEN-WEUSTENFELD 1991), the following generic key and character table (Table 1) have been compiled.

Key to the genera of *Triuridaceae* (worldwide)

1. Plants monoecious; flowers unisexual (some spp. of *Sciaphila* bisexual); number of tepals 4, 6, or 8; number of stamens 2, 3, 4, or 6; tepals not appendaged but bearded, papillate, or ending in a globose knob; style basal; fruit dehiscent (*Soridium* excepted). Neotropics and Paleotropics Tribe *Sciaphileae* 2
1. Plants dioecious; flowers unisexual (*Lacandonia* monoecious and bisexual); number of tepals three or six; number of stamens three or six; tepals provided with a filiform appendage; style (sub)apical; fruit indehiscent. Neotropics Tribe *Triurideae* 6
2. Staminate flowers provided with staminodes and/or connective appendages 3
2. Staminate flowers without sterile elements 4
3. Staminate flowers with three staminodes, and sometimes also with appendaged connectives. Madagascar, Seychelles, and East Africa *Seychellaria*
3. Staminate flowers without staminodes, but always with appendaged connectives. Southeastern Asia *Andruris*
4. Branches of inflorescence verticillate; staminate flowers with four stamens and eight tepals. Sri Lanka *Hyalisma*
4. Branches of inflorescence alternate; staminate flowers with 2–6 stamens and 4–6 tepals 5
5. Staminate flowers with two stamens and four tepals; fruit an indehiscent achene. Tropical South America *Soridium*
5. (Staminate) Flowers with three or six stamens and four or six tepals; fruit a dehiscent follicle. Tropical American mainland, Africa, and Asia ... *Sciaphila*
6. Flowers bisexual; stamens three, placed in the centre of flower within the carpels. Mexico (Chiapas) *Lacandonia*
6. Flowers unisexual; plants dioecious 7
7. Staminate flowers with anthers sessile on a conical androphore. Tropical American mainland *Triuris*
7. Staminate flowers without conical androphore 8
8. Staminate flowers with three tepals, six filamented monotheical anthers, and a sterile projection in the centre of the flower. Amazonian Peru .. *Triuridopsis*
8. Staminate flowers with six tepals, three sessile dithecal anthers, and no sterile projection. Tropical South America *Peltophyllum*

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