# tiny trumpet

*Collomia linearis* Nutt.

**Synonyms:** None
**Other common names:** narrow-leaf mountain-trumpet, slenderleaf collomia
**Family:** Polemoniaceae

Invasiveness Rank: **Not Ranked** - The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

## Description

*Figure 1 Tiny trumpet (Collomia linearis). Photo by alaskawildflowers.us, 2010*

Tiny trumpet is an annual plant with erect stems that usually grows from 10 to 60 cm tall. Stems are mostly simple but can be branched above. Basal leaf blades are lanceolate, and their margins can be toothed or entire. Stem leaf blades are lanceolate to linear, entire, and the upper leaves are usually glabrous while the lower leaves may be glandular. Inflorescence is a leafy terminal cluster of 7 to 20 flowers. Flowers are pink or white and funnel formed. Calyx consists of lanceolate, tapered lobes and measures 4 to 7 mm in diameter. Pollen is generally white. Fruit a capsule with one seed per chamber. (Johnson and Dieter 2012, Hitchcock and Cronquist 1973, Hultén 1968).

Similar Species: European stickseed (*Lappula squarrosa*) and flatspine stickseed (*Lappula occidentalis*) are two non-native species that may be confused with tiny trumpet. These two species have comparatively slim profiles with shorter, narrower leaves. European stickseed and flatspine stickseed are also generally strongly branched above, while tiny trumpet is less often so. Stem and leaves of tiny trumpet have short, soft hairs, where European stickseed and flatspine stickseed hairs are rigid. The two stickseed species (*Lappula spp.*) have prickles on seed, where tiny trumpet seed is wrinkled, non-prickled.

The native fireweed (*Chamerion spp.*) in its vegetative stage and paintbrush species (*Castilleja spp.*) may also be confused with tiny trumpet. Unlike tiny trumpet, fireweed grows from a woody rootstalk, and the underside of the leaves are paler and distinctly veined in *C. angustifolium* or fleshy and grayish in *C. latifolium* (dwarf fireweed) (Hultén 1968). The flower head bracts of paintbrush plants are often brightly colored, and the tubular calyx fully encloses the flowers when in bloom, where the flower head bracts of tiny trumpet are green and leaflike and the calyx does not enclose the flowers (Walsh 1974).

## Ecological Impact

**Impact on community composition, structure, and interactions:** When growing in disturbed habitats, tiny trumpet displays high plasticity in vegetative characteristics. The observed response to environmental variation suggests an advantageous adaptability when growing in disturbed habitats (Wilken 1977). Since tiny trumpet is considered native throughout the Lower 48 States and Canada, little is known on its competitiveness with native species. However, due to its known plasticity and success in disturbed habitats, tiny trumpet may impact native community composition in Alaskan disturbed sites characterized by their openness and poor soil development (Wilken 1977).

*Figure 2. Tiny trumpet (Collomia linearis) inflorescence. Photo by alaskawildflowers.us, 2010.*

**Impact on ecosystem processes:** Tiny trumpet is successful as an early colonizer, and may take advantage of situations of primary succession, thus out competing native species within the same niche (Wilken 1977). The seed of tiny trumpet is known to survive high temperatures (i.e. fire disturbance) (Gonzalez and Ghermandi 2008).

## Biology and Invasive Potential

**Reproductive potential:** Tiny trumpet has high levels of seed production (Wilken 1978). Each plant can produce over 100 seeds, thus capable of a sizable contribution to the seedbank in larger populations. (Wilken 1977).

**Role of disturbance in establishment:** Tiny trumpet is most commonly found in disturbed habitats, even in its native range (Wilken 1977).

**Potential for long-distance dispersal:** Tiny trumpet has a moderate to low potential for long distance dispersal due to the production of mucilaginous material on the seed surface which fixes seed to the ground. This process is induced by wetting of the seed coat, and may be an adaption for immobilization of the seed to prevent dispersal to unfavorable habitats. Inversely, production of mucilaginous material on the seed surface may lead to the attachment onto mobile units such as birds, mammals, or human devices (Hsiao and Chuang 1981).

**Potential to be spread by human activity:** The sticky, mucilaginous seed coat may aid in the attachment to anthropogenic dispersal units (e.g. machinery, clothes, boots, etc.) (Hsiao and Chuang 1981).

**Germination requirement:** Germination of tiny trumpet is not induced by continuous moisture or moistening to drying cycles at room temperature (Hsiao and Chuang 1981).

**Growth requirements:** Tiny trumpet has high adaptive plasticity and may grow under a wide range of conditions. It is most often observed growing in sandy or gravelly soils in open areas (Wilken 1978, Wilken 1977).

## Legal Listings

- Has not been declared noxious in AK, Canada or other states.

## Distribution and Abundance

**Native and current distribution:** Tiny trumpet is considered native in the lower 48 (USDA,

NRCS 2017). In its native and non-native range, tiny trumpet prefers open, disturbed habitats with poor soil quality, but also is observed in undisturbed habitats such as wet meadows (Wilken 1978, Wilken 1977). Tiny trumpet is considered non-native and introduced to the Yukon, NW Territories, Quebec, and Labrador, but native from BC to Ontario (Brouillet et al. 2010+). It is currently known to occur in Interior Alaska (AKEPIC 2025, CPNWH 2025). This species has not been observed in undisturbed areas in Alaska (Densmore et all. 2001, AKEPIC 2025, CPNWH 2025). For the most up-to-date distribution information for Alaska, please visit the AKEPIC database.

## Management

Application of 2,4-D is effective in controlling populations of tiny trumpet (Hull 1971), and mechanical control methods such as hand-pulling should be effective due to the annual habit of this forb. Either control method should be repeated in subsequent growing seasons to exhaust the seed bank if population has previously gone to seed.

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