

SILENE TOMENTOSA OTTH IN DC.
(*S. GIBRALTARICA* BOISS.)
GIBRALTAR CAMPION.

A DESCRIPTION BASED ON OBSERVATIONS OF THE
SPECIES IN THE WILD, AND ON PLANTS GROWN FROM
SEED AT THE ALAMEDA BOTANICAL GARDENS.

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Introduction

Silene tomentosa was first described by Otth in 1824, and later by Boissier in 1838. The first recorded sighting this century was by L. Linares in 1979 when one plant was found growing along Green's Lodge Road, and photographed. The next sighting was in 1985 when three plants were found above Green's Lodge Road and one plant by the entrance to the Upper Galleries, by L. Linares and A. Harper. Again photographs were taken. All these plants failed to grow in subsequent years, and so, despite annual searches, no plants were seen up till 1994. In 1994, three plants were sighted along Rock Gun Road by L. Linares, A. Harper and J. Cortes (Cortes *et al.* in prep.). Photographs were taken, seeds collected, and vegetative shoots sent to the Royal Botanical Gardens at Kew. Many hundreds of plants have been grown from these seeds and shoots, both at Kew and at the Gibraltar Botanic Gardens. This paper sets to describe the species both from the plants found in 1994 and from plants grown from their seed at the Gibraltar Botanic Gardens.

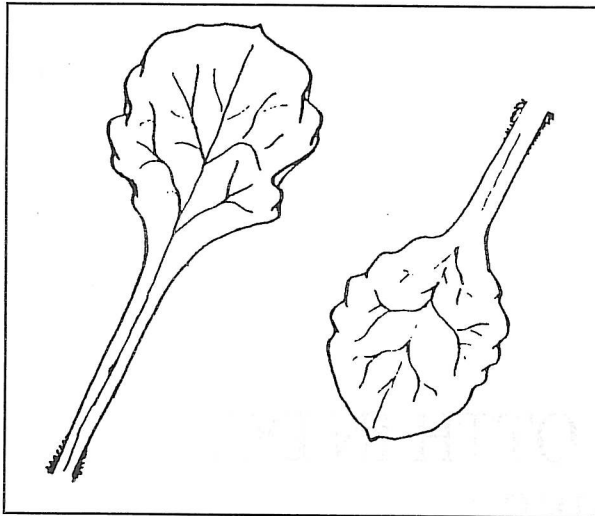


Figure 1. Basal and lower leaves.

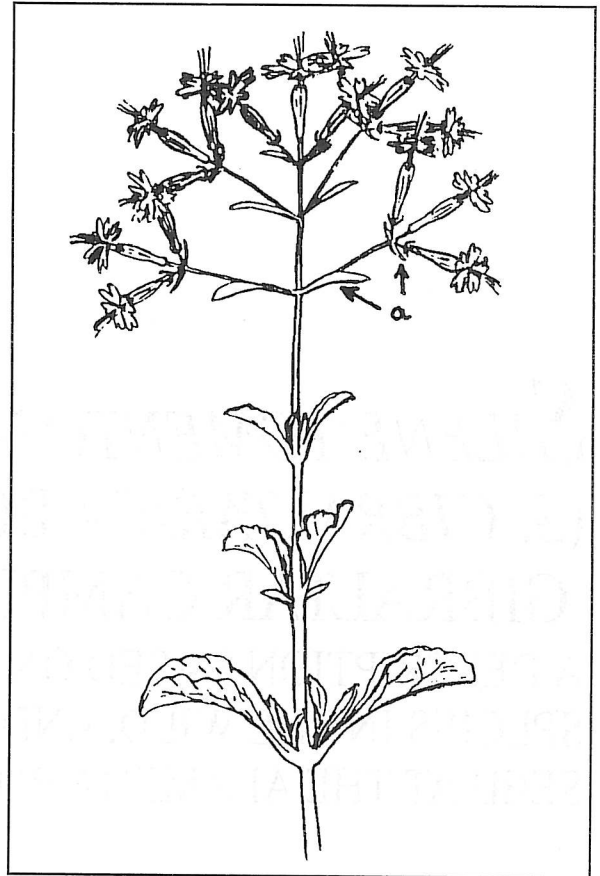


Figure 2. Inflorescence. (a) Bracts

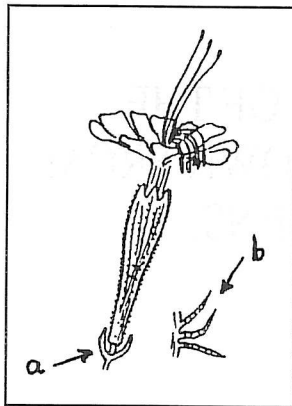


Figure 3. Flower. (a) Bracteoles.
(b) Calyx hairs

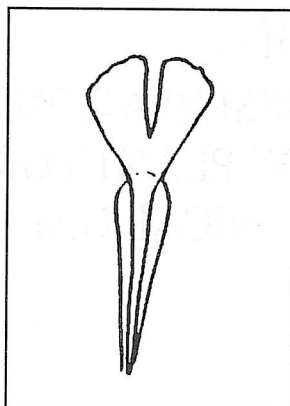


Figure 4. Petal.

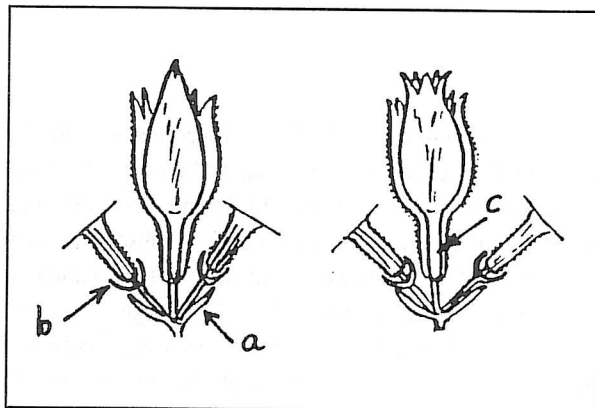


Figure 5. Capsule. (a) Bract. (b) Bracteole. (c) Carpophore

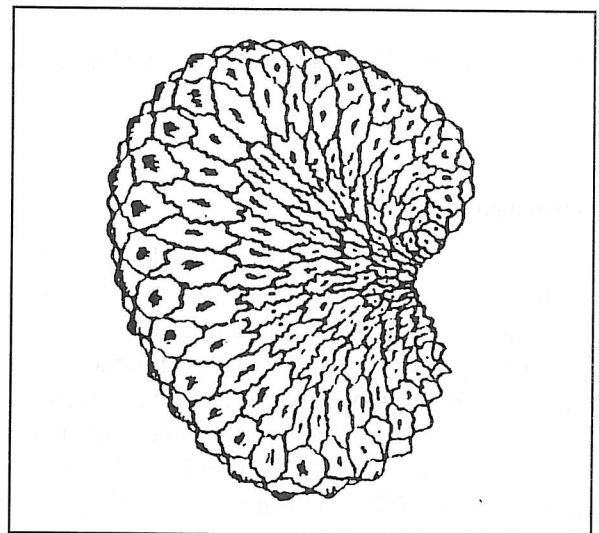


Figure 6. Seed.

Description

S. tomentosa is a woody-based perennial, branching from the base. All available evidence points to it being a short-lived perennial.

Stems are erect or ascending, ranging from 15 to 70 cm long, with an average of around 50 cm.; densely tomentose, with multicellular non-glandular hairs which reach up to 0.6 mm. on the lower parts.

Leaves opposite, thick and stiff, almost fleshy, densely tomentose, giving the plant a greyish-green appearance. Hairs multicellular, up to 0.4 mm. long, but longer around the nodes. Margins entire, usually undulated. The lower leaves spatulate, round-ovate, mucronate, from 10 to 20 cm. long, with an average around 14 cm.; maximum width ranges from 2.5 to 5.5 cm., with an average of around 3.5 cm. (Fig. 1)

Bracts oblanceolate to linear-lanceolate, up to 2.5 cm. long, the lower ones shorter than the peduncles, the upper ones about as long as the peduncles. (Figs. 2 & 5). Bracteoles 3 to 4 (-5) mm. long, usually longer than the pedicels. (Figs. 3 & 5)

Flowers from 1.8 to 2.4 cm. across, (Fig. 3) in a dense or lax thyrse (a branched panicle, the individual branches of which are dichasia) (Fig. 2). Petals generally pale violet but ranging from almost white to a deeper violet; claw exerted, from 13 to 17 mm long, auricled; limb obovate, bifid to over half way, from 8 to 12 mm long, without coronal scales (Fig. 4). Calyx from 1.8 to 2.4 cm long, with an average around 2.1 cm, umbilicate at the base, cylindrical but becoming club-shaped in fruit; densely covered with non-glandular multicellular hairs (Fig. 3); with ten violet or green veins; the whole calyx often tinged violet, especially on those flowers which have petals of a deeper colour; calyx teeth five, obtuse, 2 to 3 mm. long, with wide scarious margins which are finely ciliate. Stamens ten, hairless, exerted; anthers pale yellow, 1.8 to 2 mm. long. Pedicels of the central flowers 2 to 5 (-9) mm. long, those of the lateral flowers generally shorter from 1 to 2 (-3) mm. long; densely pubescent.

Capsule from 1 to 1.4 cm. long and up to 0.7 cm. wide, ovoid, yellowish, opening by 5 or 6 teeth. Carpophore 8 to 10 mm. long, pubescent (Fig. 5). Styles three, about 2 cm. long, violet-tinged.

Seeds reniform, tubercled, brown to greyish-brown, 1.2 to 1.4 mm long and 0.8 to 1.1 mm. wide; faces flat or slightly concave; back wide, slightly rounded, flat or concave (Fig. 6).

S. tomentosa flowers from April to May, and sometimes to June. It is a plant of limestone, and is usually found growing from fissures and hollows in the rocks. It has been stated as being a plant of coastal cliffs, but all recent sightings have been in the Rock Gun area, and none have been seen further down and closer to the sea. This species is endemic to the Rock of Gibraltar.

References

- BOISSIER, E. 1838. *Voyage Botanique dans le midi de l'Espagne, pendant l'annee 1837*. Paris.
 CORTES, J.E, LINARES, L. and HARPER A. (in prep.) *Rediscovery and reintroduction of the Gibraltar Campion Silene tomentosa*.