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# *Astrantia maxima* Pall.

## APIACEAE

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### Local Names

**Georgian** ვარსკვლავა (varskv'vlava), თესიგირი (tesigiri); ინგირი (ingiri), უკვდავა (uk'vdava); თესიგირი (tesigiri), ინგირი (ingiri); **Russian** Звездовка (svesdovka); Armenian астхабуйс (astkhabuys) (Grossheim 1952; Ketskhoveli et al. 1971–2011; Makashvili 1991; Sokolov 1988).

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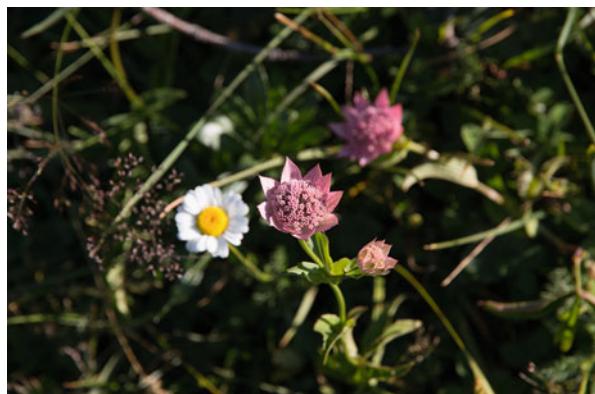
## Botany and Ecology

Perennial; stem 40–70 cm, simple, sometimes with 1–2 small branches above, usually with one fully developed umbel; lower cauline leaves on petioles 3–4 times as long as the tripartite blades, blade with median lobe narrower than lateral, sometimes sublanceolate, 3–5 cm long, 1.5–2.5 cm wide, the lateral asymmetrical, slightly larger, bristly-dentate, with three prominent nerves beneath; rarely lower leaves quadripartite; median and upper cauline leaves sessile or amplexicaul, tripartite or three-lobed, terminal leaves 2–3, ovate or lanceolate, 2–3-lobed or parted. Umbels 2–4.5 cm across; leaflets of involucre 8–13, thinly coriaceous, lanceolate or broadly lanceolate, greenish outside, reddish inside, acuminate, with 5–15 bilateral teeth tapering to 1-mm-long bristles, later subglabrous, leaflets to 2.5 cm long, 1 cm wide, nearly twice as long as flowers; flowers many, pedicels ca. 1 cm, lobes of calyx narrowly lanceolate, stiff, ca. 3 mm long with subulate tip; petals narrowly cuneate, 1.5 mm long; styles in pistillate flowers hardly divergent, half the length of the sepals; fruit ca. 10 mm long, mericarps rounded in cross section, canals very large. Flowering July–August. Caucasus, in subalpine meadows and thickets near the upper timberline, on tall-grass meadow, less often between rocks (Shishkin 1950; Figs. 1, 2, 3, and 4).

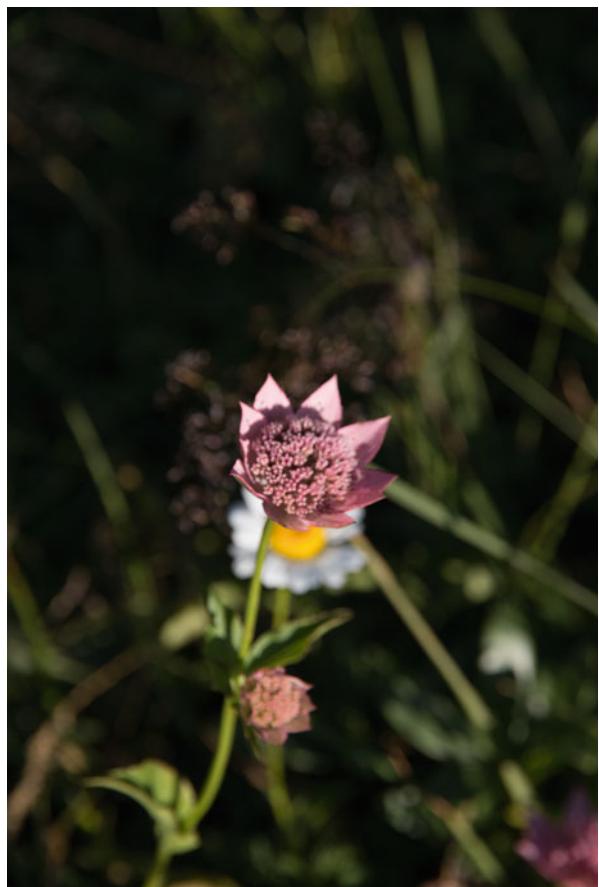
## Phytochemistry

Polyacetylene compounds, carbohydrates, organic acids (angelic, apple, malic, oxalic), triterpenoids (gypsogenin, apigenine, oleanolic, and hypsogenic acids), triterpene saponins, phenol carboxylic acids (chlorogenic), flavonoids (quercetine, kaempferol, kaempferitrine, astragaline, rutine, isoquercetin), carbohydrates, essential oils, phenylcarboxylic acids (rosemary, chlorogenic) (Sokolov 1988).

**Fig. 1** *Astrantia maxima* (Apiaceae), Bakuriani, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



**Fig. 2** *Astrantia maxima* (Apiaceae), Bakuriani, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



**Fig. 3** *Astrantia maxima* (Apiaceae), Bakuriani, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



**Fig. 4** *Astrantia maxima* (Apiaceae), Bakuriani, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



## Local Medicinal Uses

The roots are used as laxative (Sokolov 1988).

The leaves, roots, and stems are used as laxative and digestive. The root is used for diarrhea (Bussmann et al. 2016, 2017, 2018).

## Local Handicraft and Other Uses

In veterinary medicine used as laxative. Toxic. Perfect melliferous plant producing abundant nectar. Gives light-colored high-quality honey. Decorative (Grossheim 1952; Sokolov 1988). Used as ornamental (Bussmann et al. 2016, 2017, 2018).

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