

Adonis vernalis L.

Standardized Common Name: Spring Adonis

Other Common Names: False Hellebore, Pheasant's Eye, Yellow Adonis

Family: Ranunculaceae

Taxonomy: *Adonis* includes about 26 Eurasian species, all herbaceous. Several are known to contain cardiac glycosides. The annual species (which include *A. aestivalis* L., mentioned below) are taxonomically difficult; perennial species are well understood, although hybridization of *A. vernalis* with *A. vologensis* Steven ex DC. is common.

Description: Rhizomatous perennial herb. Stems 10–45 cm high, unbranched or occasionally branching. Basal leaves reduced to scales. Stem leaves alternate, sessile, 2–3-pinnatisect, feathery, composed of linear lobes 1–2 cm long. Flowers solitary, terminal, (3–)4–7(–8) cm in diameter; sepals 5, 0.75–1.5(–2) cm long, always shorter than petals, obovate, pubescent; petals 9–23, yellow, 1.5–3.5(–4) cm long, elliptical to oblanceolate, many-veined; stamens yellow, numerous; carpels numerous, separate, spirally arranged on receptacle. Fruit a head of achenes, 3–5 mm long, broadly obovate to almost spherical, with small curved beak at upper side of apex; surface pubescent, with netted wrinkles.

Parts in Commerce: Whole herb, with flowers and fruits

Identification:

Stems

- Round, to 3 mm thick, often flattened above
- Pithy, not hollow
- Mostly green, brown below
- Longitudinally striated
- Glabrous or nearly so
- Should not include base with scale-leaves and beginning of rhizome, because these parts are less potent and their harvest injures the plants

Leaves

- Sessile on stems
- 2–3-pinnately divided into numerous fine linear lobes
- Lobes 1–2 cm long, up to 1 mm broad, with acute tips
- Margins of lobes entire
- Dark green, glabrous or nearly so
- Taste bitter

Flowers

- 3–8 cm in diameter, solitary
- Sepals 5, greenish, pubescent, about half as long as petals
- Petals 9+, variable in number, pale yellow to nearly white, glossy, many-veined
- Petals elliptical, usually 2–4 cm long and <1 cm broad
- Stamens numerous, yellow
- Carpels numerous, spirally arranged

Fruits

- Achenes 3–5 mm long, almost spherical to broadly and irregularly obovate
- Surface pale green, hairy, wrinkled
- Apex blunt, with small beak at upper side; beak <1 mm long, curved inward toward fruit surface but not wholly appressed to surface

Adulterants: *A. aestivalis* L., an annual species that has crimson or sometimes yellow petals, is reported as an adulterant, and similar-appearing perennial species may find their way into commerce. Any of the following features indicates adulteration:

- Stems more than slightly hairy, or hollow
- Leaves more than slightly hairy
- Leaf lobes broader than expected, especially if margins are toothed
- Sepals glabrous
- Any petals red
- Stamens dark purple
- Fruit glabrous or with unwrinkled surface
- Beak at apex of achene almost as long as fruit, extending straight outward rather than recurved, or appressed to fruit

References:

Lange D. 2000. *Conservation and Sustainable Use of Adonis vernalis, a Medicinal Plant in International Trade*. Bonn, Germany: Bundesamt für Naturschutz; 2000. Plant Species Conservation Monographs, No. 1.

Tutin TG, revised by Akeroyd JR. *Adonis*. In: Tutin TG, Heywood VH, Burges NA, et al., eds. *Flora Europaea*. Vol. 1. 2nd ed. Cambridge: Cambridge University Press; 1993:267–269.

Youngken HW. *Text-Book of Pharmacognosy*, 5th ed. Philadelphia, PA: The Blakiston Company; 1943:336–338.



Figure 3: *Adonis vernalis*.