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Wild Watsonia

Common and scientific names

Wild watsonia, bulbil watsonia

Watsonia meriana (L.) Miller var. bulbillifera (J.W. Matthews & L. Bolus) D.A. Cooke Family Iridaceae (Iris family)

Origin and distribution

Native to South Africa, wild watsonia was originally introduced to Australia as a garden ornamental. It was considered naturalised in Victoria by 1907 and was spread widely in the 1940s as a fashionable garden plant. It is also a weed in New Zealand and on the Indian Ocean islands of Mauritius and Reunion.

It has a number of undesirable horticultural features and may best be classified as a variety that evolved naturally in an environment subject to human disturbance rather than a cultivar. Fertile plants producing seed are rare in Australia and some authors consider bulbil watsonia to be sterile.



Figure 1. Wild watsonia: a.plant before flowering, b. flowering stem, c. lower part of flowering stem showing cormils produced in clusters.

Wild watsonia is found through most of the State except for the north-west, but mainly occurs as an environmental weed in depressions and swampy areas on heavier soils in southern Victoria, particularly in the Melbourne area, Dandenong Ranges, Mornington Peninsula, South and West Gippsland, the central highlands and the Geelong region.

Description

An erect perennial herb forming large clumps; similar to gladiolus, with strap-like leaves, slender reddish flowering stems 0.5 to 2 m high, pink, orange or red flowers, underground corms and clusters of small corms (known as bulbils or cormils) on the stems. Leaves and flowering heads are produced annually.

Corms and cormils start to grow in late autumn and foliage is produced during the winter. Flowering stems are produced in spring and flowering occurs mainly in November and December. Plants that develop from cormils do not flower in the first year but produce theirfirst corm, and flower in their second or third years. Plants become dormant in late summer and autumn when the foliage and stems die off. The plant reproduces by replacement and multiplication of the underground corms and by cormils.



Fig 2. Wild watsonia infestation.

Stems – bearing 10 to 15 flowers on the main axis; straight, erect, rigid, up to 3 cm diameter and 2 m high, often maroon to red in colour (varying seasonally), cylindrical at the base, fluted in the upper section, unbranched or with 6 to 8 short branches; one stem per plant; brown spiky clusters of cormils form at nodes along the stems.

Leaves - 20 to 80 cm long, 2 to 5 cm wide, light green, rigid, upright, shaped like the blade of a sword, tough, fibrous, lacking hairs; with a prominent central midrib and numerous smaller parallel veins; growing in clusters of 6 to 10 united at the base and ascending fan-like from the top of the corm. The stem carries small, sheath-like leaves.

Flowers - curved trumpet-shaped, with 6 'petals' (perianth segments) forming a tube in the lower section of theflower; usually orange in colour but varying from brick red, through salmon-red to dull pink, 5 to 8 cm long, 3 to 4 cm in diameter, arranged singly, 2.5 to 4 cm apart, in opposite rows along the upper part of the stem and on side branches; three stamens arranged asymmetrically on one side of the flower; anthers about 10 mm long, cream or purple; perianth lobes (the outer sections of the 'petals') 1.7 to 2.6 cm long, upper lobe less than twice as long as lower and usually about the same length.

Fruit - ovoid, woody capsule, 2 to 4 cm long, with three cavities; opening from the apex into 3 valves. Fruit areoften not produced in Australia. Seeds – 15-18 mm long, oblong, winged. Rarely produced in Australia.

Roots - shallow, fibrous.

Corms - up to 8 cm in diameter, shaped like a depressed globe; enclosed in a thick, dark brown, coarsely fibrousouter tunic; usually having a double or single disc-like appendage at the base (the remains of previous seasons' corms). Usually a single new corm (sometimes 2 or 3) forms above the old corm each year. Corms occur within several centimetres of the soil surface.

Cormils - up to 2.5 cm long (usually less than 1 cm), oval with a curved beak at the upper end, shining red-brown to dark brown, in clusters of 12 to 16 in the leaf axils of the flowering stems.

Similar species

Two forms of *Watsonia meriana* occur in Victoria, the common bulbil watsonia (variety *bulbillifera*), described above, and a form reported from Anglesea which is less than 1 m high and never produces bulbils.

Of the approximately 70 species of *Watsonia* in southern Africa and Madagascar four others are naturalised in Victoria:

Watsonia aletroides (Burm. f.) Ker Gawl. The upper 'petal' is more than twice as long as the lobes and the flowers are red-orange to purple or pink. Known from roadside vegetation near Benalla.

Watsonia marginata (L.f.) Ker Gawl. Distinguished from the other four species naturalised in Victoria by the symmetrical arrangement of the stamens around the style. The flowers are pale pink or lilac. A garden escape at Anglesea, Blackburn and Mornington.

Watsonia versfeldii J.W. Mathews & L.Bolus. Has white flowers (occasionally pink, cerise or red). A garden escape on the Mornington Peninsula, South Belgrave and elsewhere.

Watsonia borbonica (Pourr.) Goldblatt. Similar to W. meriana but the 'petals' are longer (2.8 to 3.5 cm) and are pale pink to magenta in colour. A garden escape naturalised in the South Belgrave area.

Many other Watsonia species and their hybrids are cultivated in gardens in Australia.

Bulbil watsonia is often confused with montbretia, *Crocosmia X crocosmiiflora* (Lemoine ex Morren) N.E. Br. and African cornflag, *Chasmanthe floribunda* (Salisb.) N.E. Br., two other weeds in the iris family that are widespread in southern Victoria.

The flowers of both montbretia and African cornflag have only 3 stigmas (*Watsonia* has 6). Montbretia produces stolons (slender creeping stems), has leaves that are only 1 to 2 cm wide and flower stems that are bent alternately in different directions. African cornflag has a straight flower stem, a flower with an upper lobe that is much longer than the lower petals and leaves that usually exceed 80 cm in length.

The problem

Wild watsonia has naturalised widely in Victoria as a garden escape. It is mainly an environmental weed of moist sites, but can flourish in well-drained areas, and is a particular problem in small areas of remnant vegetation. The production of very large numbers of stem cormils has enabled it to become a very successful weed, forming dense stands which exclude other vegetation. Corms and cormils can remain dormant in the soil for a considerable period. It has been reported that only about 30% of the corms produce above-ground parts each year.

The plant is suspected of being poisonous to livestock, but animals do not graze large plants and are apparently unaffected by consumption of young shoots. Wild watsonia impoverishes soil and crowds out desirable pasture plants. It can cause serious loss of production but rarely persists in well managed paddocks and cultivated areas and is of little importance as an agricultural weed. It can damage and impede the use of farm implements and the dead top-growth can create fire hazards.

Dispersal

Cormils fall to the ground when the top growth dies at the end of the season. They can be widely scattered and are efficiently spread by moving water. Cormils are also spread by slashing equipment, farm implements, vehicles, birds, rabbits and stock and can be dispersed in hay, silage and grain. Corms and cormils are spread by movement of contaminated soil, particularly by graders and earthmoving equipment along railway lines and roads, and by farm implements. Most new infestations probably originate from dumped garden refuse or by spread of cormils in soil and on mowers and slashing equipment.

Management

Prescribed measures for the control of noxious weeds

- Application of a registered herbicide
- Physical removal

Important information about prescribed measures for the control of noxious weeds.

Other management techniques

Changes in land use practices and spread prevention may also support Bathurst burr management after implementing the prescribed measures above.

Further advice

- Contact your local landcare or friends group for further assistance and advice.
- Call the DEPI customer Service Centre on 136 186.
- Visit the Weeds Australia website at: www.weeds.org.au

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