

Verbena bonariensis

COMMON NAMES

purple-top, purple-top vervain

BIOSTATUS

Exotic

CONSERVATION STATUS

Not applicable

CATEGORY

Vascular

STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

SIMPLIFIED DESCRIPTION

Verbena bonariensis is easily recognisable, the long floral tubes are conspicuous, even in the herbarium. Upon seeing the prominent flowers, examine the peduncles and calyx with a lens to confirm the presence of glandularity. The difference in leaf morphology also can be confirmed with a small set of specimens - leaves of *V. bonariensis* tend to be narrower than in *V. incompta*. In addition to the distinctions in the key, in *V. bonariensis* the non-glandular hairs are thinner and the plants apparently are generally shorter in stature and more clearly annual in duration. Described differences in shape and size of the inflorescence do not appear to be consistent, except in the elongation of fruiting spikes. Within each species, South American plants are similar in variability to the North American ones.

FLOWER COLOURS

Violet/Purple

DETAILED DESCRIPTION

Plants annual, taprooted or with ligneous fibrous roots. **Stems** erect, 80–150 cm, hirsute to hirsutulous, densely so distally, sparsely to densely stipitate-glandular. **Leaves** persistent, basal and midstem oblong-lanceolate to oblong-oblongeolate, basally clasping and auriculate, 5–11 cm x 10–20 mm, distal (above midstem) becoming linear-lanceolate to linear-oblongeolate, veins impressed adaxially, both surfaces hirsutulous to hirsute-hirsutulous or hirtellous, usually sparsely to densely stipitate-glandular, margins sharply serrate, narrowly revolute; petioles absent. **Spikes** in 3s, forming compound cymes, the central mostly sessile on peduncles 0(–4) mm, inflorescence aspect corymbiform, comprising relatively compact and distinct clusters and subclusters, central and laterals dense and thick in fruit, 8–30 mm x 4–6 mm; floral bracts narrowly triangular to lanceolate or ovatelanceolate, keeled, 2.1–2.8 mm, 1/2–3/4 as long as the calyces, margins eciliate. Calyces 3–3.5 mm, purplish, hirsutulous to hirsutulous-hirtellous or hirtellous, stipitate-glandular, lobes connivent. **Corollas** purple to blue-violet or pinkish, tubes 4–6(–7) mm, 1.5–2 mm longer than the calyces, limbs 2–5 mm in diam. **Nutlets** 1.5–1.9 mm, commissural faces extending to very tip of nutlets, densely papillate to papillate-bullate. $2n = 12, 14, 28$.



Roadside weed, Ardmore Auckland.
Photographer: Marley Ford, Date taken:
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In Garden bed, Albert Park Ventral Auckland.
Photographer: Marley Ford, Date taken:
15/07/2019, Licence: CC BY-NC.

SIMILAR TAXA

Verbena bonariensis is very similar to *V. incompta* and the two species have long been confused. The flowers differ between these species, *V. bonariensis* has exerted, broader corollas and the leaves of *V. bonariensis* tend to be narrower than in *V. incompta*. In addition to the distinctions in the key, in *V. bonariensis* the non-glandular hairs are thinner and the plants apparently are generally shorter in stature and more clearly annual in duration.

DISTRIBUTION

North Island: South Island: True *V. bonariensis* is mostly seen as a weedy garden escape in cities such as Auckland and Christchurch.

Introduced in North America, Asia, Africa, Indian Ocean Islands (Mauritius), Pacific Islands, Australia.

HABITAT

A seemingly uncommon species in the wild; found naturalising mostly close to gardens and old settlements. Widely planted for insect food in gardens.

GENUS

Verbena

FAMILY

Verbenaceae

AUTHORITY

Verbena bonariensis L.

SYNONYMS

Verbena bonariensis var. *conglomerata* Briq., *Verbena intercedens* Briq., *Verbena inamoena* Briq. Bull., *Verbena bonariensis* var. *hispida* Moldenke.

YEAR NATURALISED

1871

ORIGIN

Native to South America (southern Brazil, Uruguay, Paraguay, northern Argentina).

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

NVS CODE

VERBON

REFERENCES AND FURTHER READING

Ford M. (2022). *Verbena incompta* P.W.Michael: an overlooked name for an old weed in New Zealand. *New Zealand Journal of Botany*: 1–11. (Published online: 23 May 2022)

Nesom G.L. (2010). Taxonomic notes on *Verbena bonariensis* (Verbenaceae) and related species in the USA. *Phytoneuron* 12: 1–16.

ATTRIBUTION

Fact sheet prepared by Marley Ford (5 March 2022). Brief description, Distribution and similar taxa sections are copied from Nesom (2010).

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/verbena-bonariensis/>

PDF DATE

25 May 2026