Management Guide for Rubus vestitus (European blackberry)



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|---|--------------------------------|---------------------------------------|---------------------------------------|------------------------------|--|--|
| Species Name Ru | ıbus vestitus ^{1, 2,} | ³ (RUVE ^{1, 2}) | Common Name | European blackberry | | |
| Family: Rosaceae | Supervised | Common name ^{7,} | ¹⁵ - bramble, wild bl | ackberry, shrubby blackberry | | |
| Form: Subshrub/vine | Synonyms: | Former species name- Rubus fruticosus | | | | |
| Habitat: ^{4, 5, 7} | | | | | | |
| Woodland edges, scrub and hedgebanks, roadsides, waste/disturbed areas, grasslands, and riparian areas, especially open to fairly shaded locations with moist calcareous or clay, occasionally on acidic, soils. | | | | | | |
| Occurrence: ^{1, 2, 6} | | | Native range: ^{4, 5, 6} | | | |
| Oregon and Washington, USA & British Colu | | olumbia, Canada | United Kingdom to northern Europe | | | |
| Flowering time- ^{5, 14} Ap | ril to September | | Weed class: OR- N/A, WA- N/A, BC- N/A | | | |
| Weed Class: OK- N/A, WA- N/A, BC- N/A Weed ID*: ^{3, 4, 5, 16} Scrambling deciduous/partly evergreen woody vine/shrub with biennial prickly canes 8-10 m long (26-33 ft), reaching up to 2 m (6.5 ft) in height, stems turning deep purple in sun, and moderately dense prickles all over stem that are long but fairly slender and patent (~45° to axis) to slightly declining and along slight stem ridges/angles, with dense white glandular hairs especially visible in young and inflorescence stems. Palmate leaves with 3-5 leaflets, feel relatively soft & thick due to short hairs above (along veins) & layer of whitish to grey felting below. The terminal leaflet is a little longer than wide (8 x 6 cm), can be almost round in shape (subcordate) with terminal leaves suborbiculate to orbiculate. Leaves evenly serrate-dentate with undulate margin, & a short triangular (acuminate to cuspidate) apex. Lateral flowering branches have 3- foliate and simple leaves (like the terminal leaflet of primary canes) below most of the flowers. Panicle of white to pink relatively large flowers (2.5-3 cm across) on hairy axes with stalked glands, acicles & pricklets, with 5 broadly elliptical rounded petals (10-13 mm long) and 5 reflexed, stellate hairy sepals. Stamens are longer than the styles and on deeper pink flowers may also be pink at the base of the filaments. Sepals may | | | | | | |

*ID from others of the *Rubus fruticosus* L. aggregate group (a subgenus *Rubus*) can be confused due to the group being apomictic, hybridizing, and numerous, with *R. vestitus* considered a "stable biotype" by the Biological Flora of the British Isles.^{4, 5, 6}

Look-a-likes:¹⁴ see photos below

Rubus armeniacus(Himalayan blackberry)- non-native, *Rubus bifrons* (European/Himalayan blackberry)- non-native, *Rubus ulmifolius* (elm-leaf/Himalayan blackberry)- non-native.

Weed distinction

Rubus armeniacus has smoother, greener & more angular stems, with bigger & fewer prickles, oval leaflets with prickles along mid-rib underside, slightly smaller flowers (2-2.5 cm).

Rubus bifrons and *ulmifolius- R. vestitus* has long-stipitate-glandular hairs, particularly on the flower stem, and terminal primocane leaflets that are typically suborbiculate and abaxially densely tomentose.

Ecological Impact:

Reproduces readily by seed & vegetatively, rapidly forming dense thickets that shade out natives, change habitat structure and, potentially threatening communities of conservation significance in Washington's western Cascades region .^{3, 6} Seeds are spread by birds & mammals.⁵ "Well established in certain localities within the Pacific Northwest in the U.S. but little is known about its specific impacts, trends, and management difficulty".⁶ *R. fruticosus* spp. are ranked as the fourth most serious weed of New Zealand.³

Control Methods *lack of research on *R. vestitus* require the substitution of *R. armeniacus* for many control methods.

Large Scale:

Chemical

• Triclopyr²³ (alone or with picloram) can be effective against *R. fruticosus* spp.^{11, 20}

<u>Timing</u>

- Late summer to fall when natives are senesced¹⁸. Fall application had better control than spring treatement in *Rubus spp* experiments²².
- Winter application to *R. fruticosus* spp has shown protection of deciduous undergrown.²⁰
- **Glyphosate** is effective on *Rubus* spp ^{10, 21, 23}. Apply in spring to fall while actively growing^{12, 21} with fall potentially being best ²³.
- **Metsulfuron** applied spring or fall provided 85% control of blackberry. Similar **chlorosulfuron** also had good control and was better for a bahaigrass below the blackberry.²²
- Fluroxypyr + picloram (or triclopyr) mixtures were found to have 83% control on blackberry when applied in the fall and 65% when in spring.²²
- **Imazapyr** can be used on various blackberry species, taking care with application near non-target plants as it may be absorbed or even passed between roots (apply beyond the dripline of trees). ¹⁰

Grazing – early studies have found good control of *R. armeniacus* by horse, cattle and sheep grazing, in order of increased control (daughter plant production post grazing). Goats can also reduce blackberry $.^{12, 21}$

Mowing/Cutting - removal of top growth will eventually kill blackberry plants with frequent retreatment for several years to deplete, and prevent replenishing root stores.^{3, 8} Removal of the cut material is best since blackberries can regrow from fragments of shoots or roots.³ Mowing twice per year (spring and fall) reduces blackberry abundance by over 70% after three years of treatments.¹⁸

- Cutting/mowing then spraying resprouts is recommended for effective treatment of a large thicket.¹⁸
- \circ Cutting/mowing can also be combined with prescribed burns for good control.^{18, 21}

Prescribed burning - A Willamette Valley experiment on *R. armeniacus* showed burning reduced cover by almost 70%, remaining reduced for two years. Prior mowing to reduce fuel load should be used for safety of personnel and native species.¹⁸ Some evidence with *R. armeniacus* has shown potential spread of the blackberry in some prairies due to fires and recommend several treatments.^{19, 21}

Small Scale:

- Digging & pulling can be effective in small patches of *Rubus* spp. if most of root is removed or repeated for resprouts from missed roots occurs.^{8, 17, 18, 21, 23}
- Cut-stump treatments with herbicide can also be applied to small patches with sensitive natives.²¹

Unsuccessful control methods:

Biological- a rust disease caused by *Phragmidium violaceum* was recently investigated for several species formerly called *Rubus futicosus* (all once known as European blackberry) and found ineffective as a control.⁹

| Last Updated By: Lauren Clark | Date/Time: 9/24/2019 |
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Photos:











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Look-a-like:

Table 2.4. Summary of features distinguishing between *R. fruticosus* agg. (European origin) and North American *Rubus* species.

| | EUROPEAN ORIGIN R. fruticosus agg. | NORTH AMERICAN Rubus SPECIES |
|--|---|--|
| Inflorescence (collection of flowers at the apex of the floricane) | In panicles (branched flower head) – Figure 2.1(A) | Not in panicles - Figure 2.1 (B) |
| Pedicel (flower stalk) length | Mostly less than 1.5 cm – Figure 2.1(C) | Mostly more than 1.5 cm – Figure 2.1(D) |
| Sessile (non-stalked) glands on primocane | No sessile glands | With sessile glands |
| Sepals (in fruit) | Reflexed, bent backwards from the fruit – Fig 2.2 | Not reflexed, surrounding the base of the fruit – Fig 2.2 |



Figure 2.1 Inflorescence and pedicel length (see Table 2.4 for key).

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Figure 2.2 Sepais reflexed (above) or non-reflexed (below).

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Look-a-like:



Figure 2.3 Leaf characteristics of *R. fruticosus* agg. and North American *Rubus* species in Australia. *Drawing by Beth Chandler from Evans et al.*, 2007

A-entire lobed leaf as found in R. rugosus.

B-simple (reduced trifoliate) leaf found in the upper parts of the floricane in many taxa of the *R. fruticosus* agg.

C-typical leaf found subtending base of most inflorescences in the *R. fruticosus* agg.

D-typical leaf found in taxa of the R. fruticosus agg.

E-pinnate leaf as found in R. loganobaccus, R. idaeus or R. parvifolius.

F-pedate arrangement of petiolules where the lowest pair of petiolules arises from the middle pair of petiolules as found in *R. leucostachys* or *R. riddelsdelli*.

G-digitate arrangement of petiolules where the petiolules of all leaflets arise from the same point on the petiole, for example, *R. anglocandicans*.

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Look-a-like:

Rubus armeniacus - non-native



Rubus ulmifolius - non-native



