301.38 BLACK STEM RUST

Federal Domestic Quarantine

A. Pest. Black Stem Rust, Puccinia graminis.

B. Regulated Areas.
   1. Quarantine Area.
      The coterminous 48 states and the District of Columbia.
   2. Protected Areas. Areas (state or county) designated by USDA that have eradicated rust-susceptible plants of the genera Berberis, Mahoberberis, and Mahonia under the cooperative federal-state eradication program. In addition, the state/county must employ personnel with responsibility for certificates for the interstate movement of regulated articles, and maintain and enforce an inspection program under which every plant nursery within the state/county is inspected at least once each year to ensure that they are free of rust-susceptible plants.


C. Regulated Articles. Berberis, Mahoberberis, and Mahonia plants, including seedlings, seeds, fruits, and other plant parts capable of propagation.

1. All seed used to propagate plants of the genera Berberis, Mahoberberis, and Mahonia in protected areas, and all seed used to propagate plants of the genera Berberis, Mahoberberis, and Mahonia that are certified as rust-resistant for interstate movement into protected areas, must be produced at properties where a state inspector has verified that no wild or domesticated rust-susceptible plants are growing at or within one-half mile of the property.**

D. Restrictions.

1. Prohibited Movement. The following regulated articles are prohibited from moving interstate into or through any protected area:
   a. All Berberis seedlings and plants of less than 2 years' growth, and rust-susceptible Berberis plants, seeds, fruits and other plant parts capable of propagation.
   b. Rust-susceptible Mahoberberis and Mahonia plants, seedlings, seeds, fruits, and other plant parts capable of propagation.

2. Restricted Movement. The following regulated articles may be moved interstate into or through a protected area with a certificate issued and attached.
   a. Plants of at least 2 years' growth, seeds, fruits, and other plant parts capable of propagation of the genus Berberis that are designated as rust-resistant.

b. Plants, seedlings, seeds, fruits, and other plant parts capable of propagation of the genera Mahoberberis and Mahonia that are designated as rust-resistant.

Notes: Certification is not required for California destinations.

The regulations require plants certified as resistant to black stem rust must be True to Type. For the purposes of this regulation, True to Type means "all plants in a shipment have the same vegetative characteristics. There is no evidence of hybridization on plants with at least 2 years growth in the genus Berberis. There is no evidence of hybridization on plants with 1 years growth in the genera Mahonia and Mahoberberis."

E. Rust-resistant Berberis, Mahoberberis and Mahonia Plants.

The following species and horticultural varieties of Berberis, Mahoberberis, and Mahonia have been determined to be black stem rust-resistant:

<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>* Berberis aggregata x B. wilsoniae ‘Pirate King’ *</td>
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<tr>
<td>B. ‘Amstelveen’</td>
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<tr>
<td>B. aridocalida</td>
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<td>B. beaniana</td>
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<tr>
<td>B. buxfolia</td>
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<tr>
<td>B. buxifolia nana</td>
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<td>B. calliantha</td>
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<td>B. candidula</td>
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</table>
**Personnel performing the inspections must be able to recognize rust-susceptible varieties of **Berberis, Mahoberberis, and Mahonia**. Inspectors must work side by side, 10 to 20 feet apart, and walk outward away from the property a distance of one-half mile measured from the edge of the property, and observe all plants growing in the half-mile band. The distance between the inspectors may vary within this range depending upon the visibility of the plant growth. In areas with low brush and flat terrain, the inspectors may be the maximum distance of 20 feet apart if they can observe all plants growing within 10 feet of them. In areas of high plant growth or hilly terrain, the inspectors must be closer together due to limited or obstructed visibility. Inspectors must observe all plants growing between themselves and the mid-point of the distance between themselves and the next inspector. This process must be repeated so that the entire band, measured from the border of the property to the circumference of an imaginary circle having the property as its mid-point is visually inspected in this manner.
B. thunbergii 'Sparkler'
B. thunbergii, "Thornless" *
B. thunbergii, "Upright Jewell" *
B. thunbergii, "Variegata" *
B. thunbergii 'Velglozam'
B. thunbergii xanthocarpa
B. thunbergii x 'Bailsel' (Golden Carousel®)
B. thunbergii x 'Tara' (Emerald Carousel®)
B. triacanthophora
B. triculosa
B. verrusulosa *
B. virgaturn *
B. workingensis *
B. xanthoxylon
B. x carminea 'Pirate King'
B. x frikartii 'Amstelveen'
Mahoberberis aquifolium candidula
M. aquifolium 'Smaragd'
M. aquifolium 'Sargentiae'
M. miethkeana
M. x 'Magic'
Mahonia amplectens
M. aquifolium
M. aquifolium atropurpurea
M. aquifolium compacta
M. aquifolium compacta, 'John Muir'
M. aquifolium, "Donewell"
M. aquifolium, "Kings Ranson"
M. aquifolium, "Orangee Flame"
M. aquifolium 'Undulata'
M. aquifolium, "Winter Sun"
M. "Arthur Menzies"
M. bealei
M. 'Bokasi' Sioux
M. 'Bokrafoot' Blackfoot
M. dictyota
M. fortunei
M. "Golden Abundance"
M. japonica
M. japonica x M. lomariifolia 'Charity'
M. lomariifolia
M. nervosa
M. pinnata
M. pinnata, "Ken Hartman"
M. piperiana
M. pumila
M. repens *
M. x media 'Charity'

**M. x media** 'Lionel Fortescue'
M. x media 'Winter Sun'

* Asterisk means prohibited entry into Canada.