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Copper injury

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Copper-based fungicides may cause a slight russeting (browning) to severe foliage burn. The greatest risk of injury is from copper sulfate, especially when used during cool, damp weather. Reduce the risk of copper injury by making applications only to copper-tolerant varieties, using fixed copper compounds, adding spray lime as a safening agent, avoiding use with spray oils and making applications during dry weather.

Using copper compounds for disease control is a very old practice. The positive attributes of copper as a fungicide include: (a) it is at least slightly effective for all of the major grape diseases and moderately to highly effective for controlling downy mildew, (b) it is acceptable for organic production, and (c) there is no restriction on days-to-harvest use.

Negative attributes of copper fungicides include: (a) difficulty in using products when combined with spray lime as a safening agent, (b) the risk of severe phytotoxicity under certain conditions and (c) less effectiveness than many other products for controlling most diseases. Grape varieties reported to be especially sensitive to copper phytotoxicity include Aurore, Chancellor, Merlot and Rougeon.

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