

Walnut Botryosphaeria Blight Management

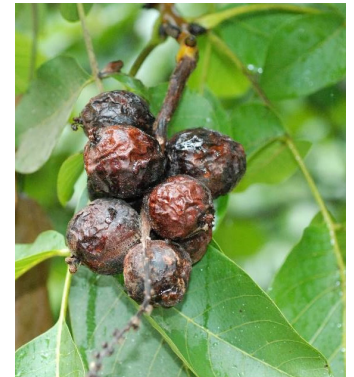
Quash® Fungicide is a highly effective foundation fungicide that **delivers proven, broad spectrum performance for a planned rotation program.**

- ▶ Broad spectrum performance
 - Effective on fungal species that cause walnut Botryosphaeria blight
- ▶ Preventive protection for when diseases strike
- ▶ Helps deliver on optimal yields and crop quality

Prevent Botryosphaeria Blight from Reducing Walnut Yields

Quash equips PCAs and growers with a much-needed option against the spread of Botryosphaeria blight (Bot blight), a disease complex of 10 fungal species to which all California walnut cultivars are susceptible.

Research from UC has demonstrated that fungi in the Bot blight complex can infect unwounded green fruit during the growing season. With as little as 4 mm of rainfall, spores of these fungi can start infecting after 1.5 hours of leaf wetness when temperatures are greater than 50°F. Bot blight fungi can also invade pruning wounds, leaf scars, bud scars, peduncle scars and disease lesions. Symptoms of Bot canker and blight include black and shriveled nuts, black spur cankers, dead leaves and spurs.¹



In addition to cultural practices, Quash should be used to reduce infections during the season and pathogen populations at harvest. **Quash is active against the three most prevalent fungi in the Bot blight complex:** *Botryosphaeria dothidea*, *Neofusicoccum mediterraneum* and *Neofusicoccum parvum*.

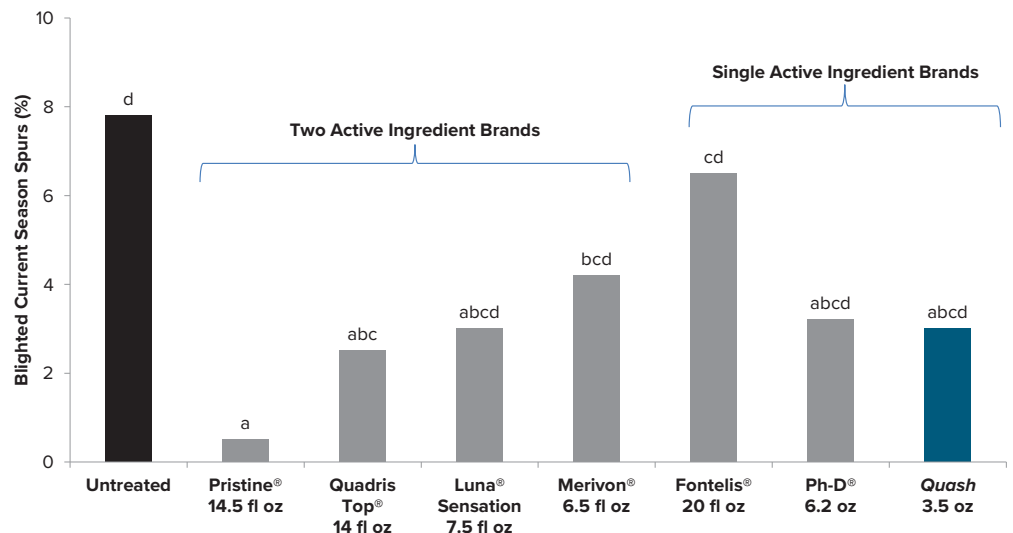
¹Michailides, T. (2015) Managing Botryosphaeria and Phomopsis in Walnut [PowerPoint Slides]
Retrieved from <http://cetehama.ucanr.edu/files/207425.pdf>

Quash—Highly Effective Fungicide for Managing Bot Blight

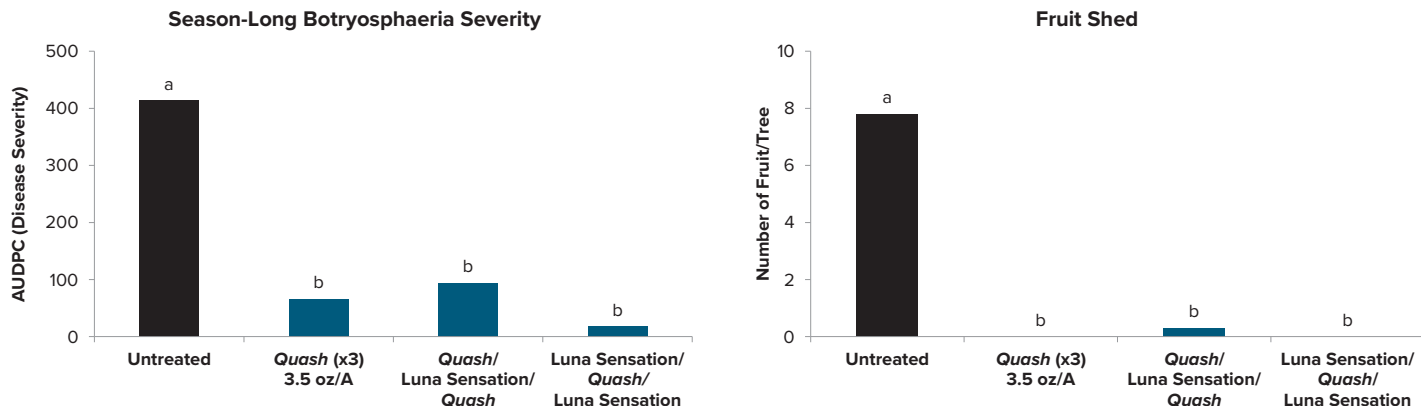
Quash, applied alone in a calendar spray program, effectively reduced the incidence of Bot canker and blight on current season spurs

Note: Treatment means followed by the same letter are not statistically different

Source: UC, 2015



Quash—Reduces Bot Severity and Fruit Shed



Quash, applied alone or in a rotation program with Luna Sensation, significantly reduced Bot severity and fruit shed versus untreated

Quash Disease Control Rating

Botryosphaeria Blight ★★★★★

★★★★★ = excellent and consistent

Efficacy rating is from the UC 2017 Efficacy and Treatment Timing of Fungicides for Deciduous Tree Fruit, Nut, Strawberry and Vine Crops publication

How To Use

Rate	3.5 oz/A
Timing	A three-spray rotation program starting in May with two applications of Quash as Spray 1 and 3, or one application of Quash as Spray 2. Rotate Quash (FRAC Group 3) at 21-day intervals with another fungicide with a different mode of action against the target disease.
PHI / REI	25 days / 12 hours