

SAG-18

Biochemical Biopesticides for the Control of Plant Pathogens

SAG-18-Table 2

Disclaimer: The Ohio State University does not guarantee the efficacy or quality of any of these products. By law, it is the pesticide applicator's responsibility to read and follow all current label directions for the specific pesticide being used.

Trade Name	Ingredient	Manufacturer	Target Crop	Target Disease	Efficacy ^{1,2}
Garlic Barrier®	Garlic oil	Garlic Research Labs, Inc.	Cucurbit crops, forage crops, fruiting vegetables, herbs, kiwi, leafy vegetables, legume vegetables, nut trees, ornamentals, peanuts, pome fruit trees, root and tuber vegetables, small fruits and berries, stone fruit trees, sugarcane, sunflowers, tropical fruits, turfgrass	Brown spot, insect infestation	Tomato/early blight: o
Green Light® Neem Concentrate	Neem oil	Green Light Company	Vegetables, fruits, nuts, and spices	Powdery mildew, rust, anthracnose, leaf spot, and other diseases	Crapemyrtle/ <i>Cercospora</i> leaf spot: o Dogwood/powdery mildew: + Dogwood/spot anthracnose: o Dogwood/ <i>Cercospora</i> leaf spot: ±

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Trade Name	Ingredient	Manufacturer	Target Crop	Target Disease	Efficacy ^{1,2}
<i>Trilogy</i> ®	Neem oil	Certis USA	Citrus, tree fruits, cucurbits, bulb, cole and leafy vegetables, legume and fruiting vegetables, root and tuber vegetables, small fruits and berries, herbs and spices, cereal and grains, nuts, corn, alfalfa, cotton	<i>Alternaria</i> , anthracnose, leaf blight, <i>Botrytis</i> , greasy spot, leaf spot, post bloom fruit drop, powdery mildew, molds, scabs, rusts, shot hole	Tomato/early blight: o Bean, snap/white mold; gray mold: ± Grape/powdery mildew: o Pumpkin/Powdery mildew: ± Almond/brown rot: + Almond/scab: o Sweet cherry/powdery mildew: ±
Triact® 70EC	Neem oil	Certis USA	Citrus, tree fruits, cucurbits, bulb, cole and leafy vegetables, legume and fruiting vegetables, root and tuber vegetables, small fruits and berries, herbs and spices, cereal and grains, nuts, corn, alfalfa, cotton	<i>Alternaria</i> , anthracnose, leaf blight, <i>Botrytis</i> , greasy spot, leaf spot, post bloom fruit drop, powdery mildew, molds, scabs, rusts, shot hole	Poinsettia/powdery mildew: +

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Trade Name	Ingredient	Manufacturer	Target Crops	Target Disease	Efficacy ^{1,2}
Actino Iron®	Iron	Natural Industries, Inc.	Food and fiber crops, ornamentals, landscape plants, tree seedlings for transplanting to the forest	Soil-borne plant root rot and damping-off disease	Snapdragon/root rot: +
ECO E-RASE®	Joboba oil	IJO Products, LLC	Garden and commercial vegetables and crops	Powdery mildew and whitefly	Pumpkin/powdery mildew: ±
SeaCide®	Fish oil	Omega Protein, Inc.	Field crops, orchards, vineyards, and greenhouses	Black spot, powdery mildew, and greasy spot	Tomato/late blight, bacterial spot: o Tomato/bacterial spot; early blight: + Summer squash/powdery mildew: ±
Heads Up® Plant Protectant	Extract of <i>Chenopodium quinoa saponins</i>	Heads Up Plant Protectants	Soybeans, potato, tomato, peas, beans, and wheat	Soil-borne plant root rot and damping-off disease	Peas/root rot: + Tomato/early blight: +
Promax™	Thyme oil	Bio Huma Netus, Inc.	Crops, ornamental plants, and turf	Fungal disease	Pumpkin/ <i>Phytophthora</i> blight: ± Squash/ <i>Phytophthora</i> blight: ±
Proud 3™	Thyme oil	Bio Huma Netus, Inc.	Crops, ornamental plants, and turf	Fungal disease	Turnip greens/Bacterial leaf spot: o Pumpkin/ <i>Phytophthora</i> blight: ± Squash/ <i>Phytophthora</i> blight: ±
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Trade Name	Ingredient	Manufacturer	Target Crops	Target Disease	Efficacy ^{1,2}
Organic JMS Stylet-Oil®	Paraffinic oil	JMS Flower Farms, Inc.	Grape, tree fruit, grass seed, and vegetable crops	Powdery mildew and <i>Botrytis</i> bunch rot	Pumpkin/powdery mildew: + Tomato/powdery mildew: o Bacterial speck <i>Septoria</i> leaf spot: o Strawberry/leaf spot: o Phomopsis/leaf blight: o Black currant/white pine blister rust: +
PureSpray™ Green	Petroleum oil	Petro-Canada	Apples and pears, almonds, apricots, cherries, nectarines, peaches, pistachio, plums, prunes, avocados, citrus, grapes, olives, tropical fruit, ornamental fruits, and vegetable crops	Powdery mildew	Grape/powdery mildew: o
Saf-T-Side®	Petroleum oil	Brandt Consolidated	Apples and pears, almonds, apricots, cherries, nectarines, peaches, pistachio, plums, prunes, avocados, citrus, grapes, olives, tropical fruits, ornamental fruits, and vegetable crops	Powdery mildew, black spot, and rust	Cucumber/downy mildew: o Apple/powdery mildew: + Almond/brown rot: + Almond/scab: +

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1. The efficacy ratings are based on the results of studies published between 2000 and 2009 in the Plant Disease Management Reports (plantmanagementnetwork.org). These ratings are built on a comparison between untreated controls and the application of each product independently.
2. + Evidence for disease control and/or yield increase, ± mixed results, o no obvious response to treatment, and * no data available in the selected PDM reports.
3. These products are not currently registered for use in the state of Ohio.