

Baking soda against powdery mildew in okra

Recognize the problem

Powdery mildew is a fungal disease. Plants affected by powdery mildew look like they have been dusted with flour. The disease first starts off as circular powdery white spots which can appear on leaves, stems and sometimes fruits. Later it usually covers the entire upper part of the leaves. It affects the older leaves first. At the end, the leaves turn yellow and dry out.

Background

Powdery mildew affects a wide variety of crops and takes away a plant's nutrients. This causes the plant to become weak and the growth rate becomes slow.

Baking soda (sodium bicarbonate) is a common powder found in almost all the super markets. It can be used in organic farming. Baking soda works by creating a harsh environment for the fungus to survive on the leaf. If available, use potassium bicarbonate which is more effective than sodium bicarbonate (baking soda). The spray of water and potassium bicarbonate will kill and prevent the powdery mildew to some extent. When 6-10 out of 100 okra plants are showing the initial spots of whitish powdery growth on the leaves, potassium bicarbonate solution may be sprayed. When the problem is expected to become severe, such sprays may not be efficient enough. When most leaves are covered with the mildew, all actions, even chemical sprays, are too late.

Management

- Wear gloves
- Mix 9-10 tablespoons (bottle top lid) of potassium bicarbonate with 16 litres of water in a knapsack sprayer.
- Add 3-4 tablespoon vegetable oil or any available cooking oil. This helps the spray to stick to the leaves.
- Add 9-10 tablespoons of soft dish washing soap (such as sunlight™)
- Close the sprayer well and shake.
- Spray on both the top and bottom of the leaves using a knapsack sprayer
- Spray once a week for three weeks and switch to 11-12 tablespoons if fungus is still growing or spreading.
- Spraying should be done in the morning or evening when the leaves are still moist
- Do not spray on okra that is soon to be harvested

Whitish powdery mildew attack on okra leaves. (Photo by Scot Nelson)



Baking soda. (Photo by Melissa Baldwin)



Scientific name(s) > *Podosphaera spp.*

The recommendations in this factsheet are relevant to: Democratic Republic of the Congo, Malawi, Tanzania, Zambia



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