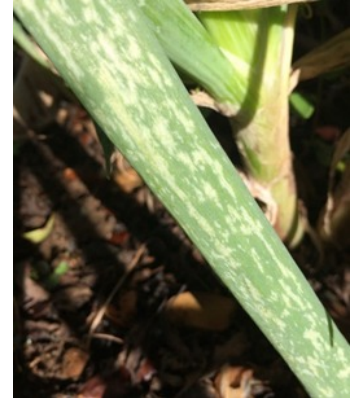


Using neem seed for managing thrips in onion

Recognize the problem

Thrips are very small insects, about the size of a flea and just about visible to the naked eye. Immature stages referred to as nymphs are either yellow or white. Older individuals are yellowish-brown and move quickly. They feed by damaging the surface of the leaves and sucking the sap that exudes from the leaves. They often gather along the leaf veins. Onion leaves damaged by thrips are silvery or have tiny brownish marks or spots. They may be wilted or distorted. Outer leaves are brown at the tips. In cases of severe injury, leaves drop and bulbs are small and malformed. Yield loss can be more than 50% if control measures are not taken.

Feeding damage caused by thrips on onion leaves. (Photo by Scot Nelson, flickr.com)



Background

Eggs are inserted in to leaf tissues and after two larval instars, the insects drop to the soil to pupate. Several generations can develop each season. Hot and dry weather favours population buildup. Eggs are laid in the leaves and stem of young plants. They are white, and take 4-10 days to hatch. Both nymphs and adults scrape the epidermis of the leaves and suck the exuding sap. Nymphs moult twice in about five days and are white or yellow. Pupation occurs in the soil and takes 4-7 days. One generation can take place in about three weeks. Neem has been shown to be effective at controlling the pest with minimal effect on the pest's natural enemies and the environment. Using the proper method of extracting the active ingredient is essential for effectively using neem for managing thrips. High concentrations of Neem can damage the plants.

Management

- Collect ripened neem seeds and dry the seeds under shade
- When the seeds are dry, remove the husk and grind the seeds using a mortar and pestle
- Store the powder in a dry place
- When you want to use the neem, mix 1 kg of the powder with 15 L water and leave it to soak over night
- The following morning, sieve the mixture, add 1 tea spoon of soft soap (horticultural soap) to 15 L of solution. Stir, and spray onto the onions
- The neem solution can be applied once every fortnight

The recommendations in this factsheet are relevant to: Ethiopia



Authors: Gashawbeza Ayalew, Bullo Tuke, Taye Asfaw
 Ministry of Agriculture and Natural Resources
 email: gashawbeza@yahoo.com

Edited by Plantwise.