### Created in Zambia, July 2014



# Intercrop cabbage with onion against aphids

## **Recognize the problem**

Aphids are very small soft-bodied roundish insects of about 1 to 3 mm in length. The body colour varies from yellow to green to brown to purple. They live on most fruits, vegetables and ornamentals. Aphids feed by sucking sap from the plant. In cabbage, they are found on the leaves where they feed and cause damage. The signs of aphid infestation include curling or distortion of leaves, production of a sugary substance called honeydew, which leads to black substances called sooty mould on the leaves, and the presence of tiny insects on the leaves. The insects can be mistaken for the similarly small thrips, also found on onions, but thrips are thinner and longer than the roundish aphids.

# Background

Aphids multiply very fast and can result in yield loss if not controlled. Aphids can also carry virus diseases of vegetables. To control aphids, strong smelling plants like onions can be intercropped with cabbage. Onions produce a chemical that is repellent to many aphids, but also to other insects.

# Management

- Prepare fine tilled land by digging and crushing clods
- Rake the tilled land evenly and level it
- Make planting rows and stations of cabbage with spacing of 60 cm between rows leaving a space of at least 20 cm on the borders.
- For cabbage, the planting distance can vary depending on the variety. For example, the plant to plant spacing for Riana F1 is 30 cm (45 cm x30 cm), Sugar loaf 60 cm (60 cm x 60 cm) and Drum head 45 cm (45 cm x 45 cm).
- Make onion planting rows of 15 cm inter-row distance between the planting rows of cabbage and on the borders of the field. These border rows of onion create a barrier for the aphids.
- Plant your onions using a spacing of 10 cm from plant to plant in the rows between the cabbage and on the border rows.
- Any variety of onion can be used but it is recommended to use Red creole or Texas Grano for their high repellent qualities.
- Two weeks after planting the onions, start planting your cabbage into the prepared stations. Ensure proper crop management for better results.

Cabbage plants affected by aphids. (Photo by Whitney Cranshaw, Colorado State University, Bugwood)



Cabbage intercropped with onion. (Photo by micamonkey, via Flickr)



#### Scientific name(s) > Brevicoryne brassicae

The recommendations in this factsheet are relevant to: Zambia



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