

Evaluation of *Allium sativum* and *Allium cepa* intercrops on the control of *Brevicoryne brassicae* (Homoptera: Aphididae) in *Brassica napus*

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Abstract

Cabbage aphid (*Brevicoryne brassicae*) poses a threat to production of most vegetable crops including rape (*Brassica napus*). A trial was carried out at the Midlands State University Research Field in Zimbabwe (2013) to determine the effectiveness of intercropping rape with garlic (*Allium sativum*) and onion (*Allium cepa* cv. King onion) on cabbage aphid infestation and yield of rape (*Brassica napus* cv. Giant rape). The experiment was laid out as a Randomized Complete Block Design with 4 treatments (sole cropped rape, rape + onion intercrop, rape + garlic intercrop, and onion + garlic + rape intercrop) replicated 5 times. Data on aphid counts, cumulative rape leaf mass and rape leaf damage was collected from week 3 to week 6 after planting. The results showed that intercropping rape with garlic and onion had significant ($p < 0.001$) effect on rape fresh mass, leaf damage and aphid population. Intercropping rape with garlic recorded the lowest aphid population, least leaf damage and highest leaf mass as compared to all other treatments. However results from intercropping rape with garlic and onion were not significantly different from intercropping rape with garlic. Basing on the research findings, it was concluded that intercropping rape with garlic is an effective practice in the control of aphids in rape recommendable for adoption by resource-poor smallholder vegetable producers.