

## **Within-plant distribution of predators on chilli**

### **ABSTRACT**

The within-plant distribution patterns of the predators Coccinellidae (ladybird beetles), Formicidae (ants) and Araneae (spiders) on chilli were traced throughout a crop growing season to formulate the predator sampling unit on chilli plants. The predators were more abundant from main-stem node 0 (main-stem 0 is the uppermost terminal bud) through node 5, due partly to the availability of food sources. As the plant grew, more predators spread out downwards, and their distribution patterns changed parallel to changes in distribution patterns of the prey, their natural enemies and changes in plant morphology due to aging and pest damage. Generally in areas where ants were in abundance, the numbers of other predators were small. Overall this study suggests the selection of zone one (main-stem nodes 0 to 5) as the optimum sampling unit for predators on chilli plants, where the general population proportion per plant for the growing season were 65% for Formicidae, 78% for Coccinellidae and 78% for Araneae.

**Keyword:** Chilli; Predator; Sampling; Within-plant distribution; Coccinellidae; Aphid