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# Occurrence of Millipedes by Example of *Spinotarsus caboverdus* on Cape Verde

Beata Nascimento, Helga Sermann, Carmen Büttner

*Humboldt-Universität zu Berlin, Institute for Horticultural Sciences, Section Phytomedicine, Germany*

**Abstract**

The species *Spinotarsus caboverdus* has been falling into disrepute for 20 years as a pest of many plants which are important for the food of the inhabitants of the Cape Verde. *S. caboverdus* is an example of diplopods that was spread by people through trading. It does not only live on all kinds of vegetal waste materials, but also attacks crop plants like potato, pumpkins, tomatoes, cassavas, melons, ripe strawberry, cabbage, germinating beans and corn. The species *S. caboverdus* prefers fruits like papayas, mangos, bananas and pineapple and heavily damages them due to its massive presence.

Through laboratory breeding and field investigations we can answer some questions about millipede reproduction processes and life cycle. We were able to ascertain that the species *S. caboverdus* produces one generation per year on the Isle Santo Antao. Adults are present throughout the whole year but the maximum number of them seems to be in June, July and August. Under lab-conditions adults can live up to 8 months. In this time they are frequently changing their place to find food plants and best conditions for reproduction. During the first four phases the juveniles remain in the ground and use mainly dead organic matter as food. The later juvenile stages can also be found on plants in or on the soil' surface. The whole development of the juveniles takes 7 months.

This pest is problematic due to the high population density. *S. caboverdus* uses very well the ecological conditions of the island to its advantage. The mountainous character of the island Santo Antao with its humid microclimate is especially suited for the preservation of the species during the dry season. The traditional irrigation system forms optimal conditions for reproduction and early development. Thus, they reach a high reproduction rate and through the strong mobility we find a permanent spread of the species. In additional to this, Millipedes have few predators or parasites on Cape Verde which can effectively control density of their population. These circumstances are the reason for a constant high population density across the island Santo Antao since its first detection in 1987.

**Keywords:** Cape Verde, Millipedes, traditional migration system

**Contact Address:** Beata Nascimento, Humboldt-Universität zu Berlin, Institute for Horticultural Sciences, Section Phytomedicine, Lentzeallee 55/57, 14195 Berlin, Germany, e-mail: beata.nascimento@agrar.hu-berlin.de