

restoration may be more successful if the site of the donor population is similar to the site where restoration takes place.

Tritrophic interactions of transgenic Cry1Ab maize, transgenic Cry3B eggplant, *Tetranychus urticae* (Arachnida: Prostigmata), and its specialized predator *Stethorus punctillum* (Coleoptera: Coccinellidae)

Tritrophische Interaktionen zwischen transgenem Cry1Ab-Mais, transgener Cry3B-Aubergine, Tetranychus urticae (Arachnida: Prostigmata) und deren spezialisiertem Prädator Stethorus punctillum (Coleoptera: Coccinellidae); 31 pp.

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1 Transgenic plants expressing specific insecticidal toxins from the bacterium *Bacillus thuringiensis* Berliner (Bt) have become of increasing interest for agricultural pest management. However, laboratory experiments have shown that non-target insects, e.g. generalist predators, can be affected by toxins from Bt transgenes via the food chain. In this study, possible prey-mediated effects of transgenic Bt plants on a specialist predator, the lady beetle *Stethorus punctillum* (Weise) (Coleoptera: Coccinellidae) were investigated.

2 Maize expressing the lepidopterocidal Bt toxin Cry1Ab (variety 'Mon810', MONSANTO) and eggplant expressing the coleo-pterocidal Bt toxin Cry3Bb (variety '9-8') with their respective isogenic control lines were grown in the greenhouse. To test the biological activity of the toxins in the leaf tissue, bioassays were conducted with the target organisms of the respective plants in addition to an immunological test for toxin expression.

3 Tritrophic level experiments were performed in leaf cages attached to whole living plants under constant environmental conditions. In separate treatments of either plant variety, larvae of *S. punctillum* were fed with herbivorous spider mites (*Tetranychus urticae* (Koch) (Arachnida: Prostigmata)), their principal model prey species, which were allowed to feed on the leaf tissue for at least 24 h. Mortality and developmental stage of the larvae were recorded every second day.

4 The biological activity of the toxins was verified for both Cry1Ab maize and Cry3Bb eggplant. Between the treatments of Bt and non-Bt maize and eggplant, no significant differences were found in the total mortality of *S. punctillum* immature stages and the total immature developmental time.

5 Especially in eggplant, relatively high control mortality was experienced, which might have masked differences in the studied life history parameters.

Fire and Vegetation on Praslin and in the Fond Ferdinand, Seychelles

Feuer und Vegetation auf Praslin und im Fond Ferdinand, Seychelles; 55 pp.

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1 Fire is considered to be a major hazard for the endemic vegetation in the Inner Seychelles because it creates vegetation gaps that are prone to the establishment of invasive species. Firebreaks have therefore been made to protect ecologically valuable areas. However, vigorous resprouting of endemics has been observed after fire in the Fond Ferdinand. This suggests some fire adaptation of the endemic flora and raises the question who actually profits most from fire: the introduced or the native species?