

Attack of two new spider mites on sweet potato (*Ipomoea batatas*) in Diamantina, Minas Gerais State, Brazil

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(With 1 figure)

Ipomoea batatas (L.) Lam. Convolvulaceae is a plant whose tubers are potentially used as food in underdeveloped countries (Mukhopadhyay et al., 2011). There are few reports on pests that attack sweet potato in Brazil. In addition, reports on mites that attack this plant are rare, referring only to the species *Brevipalpus phoenicis* (Geijskes, 1939) (Acari: Tenuipalpidae) (Flechtmann, 1987) and *Tetranychus desertorum* Banks, 1900 (Acari: Tetranychidae) (Mineiro et al., 2007).

The olericulture sector at Universidade Federal dos Vales do Jequitinhonha e Mucuri – UFVJM, in Diamantina, Minas Gerais state, Brazil, has a sweet potato germplasm bank, in pots, under greenhouse conditions. From August to November 2011, mites from the two species were observed attacking and causing severe damage and death in those plants (Figure 1). Infested leaves were taken out, packaged in plastic bags and later sent to taxonomist Dr. Gilberto José de Moraes from Escola Superior de Agricultura “Luiz de Queiroz” – ESALQ-USP, Piracicaba, São Paulo,

Brazil. These mites were identified as *Tetranychus ludeni* Zacher, 1913 and *Tetranychus urticae* Koch, 1836 (Acari: Tetranychidae).

This is the first study reporting these species of Tetranychidae attacking the sweet potato. A recent revision related *T. ludeni* to the host plants *Citrullus lanatus* (Thunb.) Cucurbitaceae; *Pelargonium hortorum* L.H. Bailey Geraniaceae (geranium); *Prunus domestica* L. Rosaceae (plumb) and *Citrus limonia* L. Rutaceae (mandarin-lime). *Tetranychus urticae* was associated with the species *Ambrosia polystachya* D.C. Asteraceae (ragweed); *Parthenium* sp. Asteraceae (parthenium); *Pyrostegia venusta* Miers Bignoniaceae (flame vine); *Phaseolus lunatus* L. Fabaceae (lima beans); *Macroptilium atropurpureum* (L.) Fabaceae (siratiro); *Passiflora edulis* Sims Passifloraceae (yellow passion fruit); *Triticum aestivum* L. Poaceae (wheat); *Alpinia purpurata* K. Schum Zingiberaceae (alpinia) and *Lantana camara* L. Verbenaceae (wild sage) (Mendonça et al., 2011). The species *T. ludeni* and *T. urticae* occur together and have potential to cause severe damage and death to sweet potato plants cultivated in Brazil. They should thus be considered in programmes of integrated pest management – IPM – for this crop.

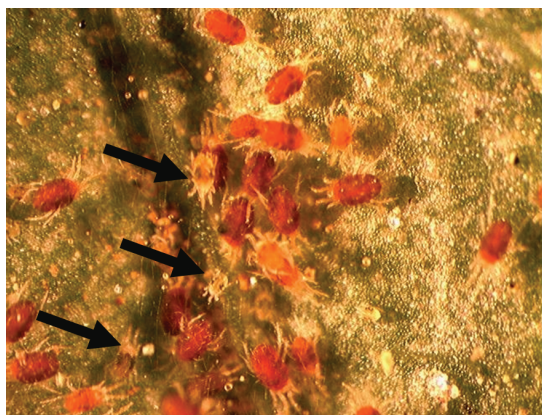


Figure 1. *Tetranychus ludeni* Zacher (red mite) infestation and *Tetranychus urticae* Koch (two-spotted spider mite – indicated by arrows) (Acari: Tetranychidae) in sweet potato (*Ipomoea batatas* L. Lam). Diamantina, Minas Gerais, Brazil, 2011.

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