



Phytophagous mite invasions in Latin America and Europe—lessons learnt from the last three decades*

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*In: Zhang, Z.-Q., Fan, Q.-H., Heath, A.C.G. & Minor, M.A. (Eds) (2022) *Acarological Frontiers: Proceedings of the XVI International Congress of Acarology (1–5 Dec. 2022, Auckland, New Zealand)*. Magnolia Press, Auckland, 328 pp.

Phytophagous mites are among those arthropods that can become invasive pests severely affecting host plants in both agricultural systems and natural environments. In addition to the direct damages caused by high populations they can act as vectors of major plant pathogens, especially viruses. Among invasive arthropods they are remarkable for their reduced size, cryptic habitats, efficient aerial dispersal and adaptability to new host plants and environments. These traits facilitate their unintended entry, as well as their fast dissemination and establishment in new areas. Over the last three decades, several species of phytophagous mites in the families Tetranychidae, Tarsonemidae, Tenuipalpidae and Eriophyidae stand out as invasive species around the world. In this talk I will focus on invasion case studies from Latin America and Europe, including the panicle rice mite *Steneotarsonemus spinki* (Smiley), the Red palm mite *Raoiella indica* (Hirst), the citrus hindustan mite *Schizotetranychus hindustanicus* (Hirst), the wheat curl mite *Aceria tosichella* (Keifer), and the lychee erinose mite *Aceria litchii* (Keifer) in Latin America; the Texas citrus mite *Eutetranychus banksi* (McGregor), the citrus brown mite *Eutetranychus orientalis* (Klein), and the persea mite, *Oligonychus persea* Tuttle, Baker & Abbatiello in Europe. Information on likely pathways, invasion history, dissemination, socio-economic and environmental impacts, containment and control measures and their effectiveness will be analysed. The lessons that can be learnt from the past will be discussed with the objective of supporting pest risk analysis and contributing to the prevention of new invasions.

Keywords: bioinvasions, plant protection, pest risk analysis