



Extended distribution and host plants of *Nameriophyes sapidae* Xue & Zhang 2008 (Acari: Eriophyidae) in New Zealand

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Nameriophyes sapidae Xue & Zhang (Acari: Eriophyidae) was found on transplanted nikau palms, *Rhopalostylis sapida* (H. Wendl. & Drude) in Auckland, New Zealand and described as a new species (Xue & Zhang 2008). Although *R. sapida* is a native plant species, it was not known if this mite species was indigenous or adventive because it was collected only from transplanted palms in unnatural gardens in Auckland. A survey was undertaken of *R. sapida* and the Kermadec Island palm, *Rhopalostylis baueri* (Hook. f.) Wendl. & Drude in the northern part of the North Island and Chatham Island.

Specimens of *N. sapidae* were found on nikau palms in nine localities in the Auckland Region and the Coromandel. This species was also found on nikau palms planted in parks, as well as on nikau palms growing naturally in native forests on the east and west coasts. *Nameriophyes sapidae* was also collected from *R. sapida* in the Nikau Reserve on Chatham Island. The extended distribution records of *N. sapidae* strengthen the hypothesis that the mite is an indigenous species in New Zealand.

Nameriophyes sapidae was also found on *R. baueri* growing at Mount Albert Research Centre, Mount Albert, Auckland. This mite species thus occurs on both species of *Rhopalostylis* in New Zealand.

Nameriophyes sapidae is found on the underside of fronds and is always associated with orange-brown or black patches on palm fronds (Fig. 1). The presence of these mites can be recognized by an apparent white dusting of white exuviae and the living mites on and around the discoloured area of the frond. When viewed under a microscope, many of the mites had a mass of flocculent wax laterally (Fig. 1).

From the original nikau palms at Landcare Research in Tamaki, Auckland, *N. sapidae* was collected with the fungus, *Pseudocercospora arecacearum* U. Braun & C.F. Hill (Braun *et al.* 2006). According to Braun *et al.* (2006), *P. arecacearum* displayed the following symptoms: “conspicuous lesions; leaf spots variable in shape and size, often oblong, covering large leaf segments or entire blades discoloured; necrotic; straw-coloured; yellowish; ochraceous; dingy brown; greyish brown and margin indefinite”. It is unclear how the mites and the fungi interact to produce the damage on leaves.

Material examined & vouchered: 1 slide with serial number 10-865Z (6 females), 4 March 2010, Matuku Reserve, Bethells, Auckland, New Zealand, collector N.A. Martin; 2 slides with serial number 10-864Z (1 female, 1 male and 2 nymphs; 5 females and 2 nymphs), 5 March 2010, Rapaura Walter Gardens, Thames, Coromandel, New Zealand; 5 slides with serial number 10-873Z (11 females, 5 nymphs and 1 egg; 14 females and 2 nymphs; 16 females, 12 males, 11 nymphs and 3 eggs; 6 females, 1 male and 1 nymph; 6 females), 17 May 2010, *Rhopalostylis baueri*, Mt Albert Research Centre, Auckland, New Zealand, collector N.A. Martin; 2 slides with serial number 10-874Z (4 females, 1 male and 1 nymph; 3 females, 1 male and 5 nymphs), 17 June 2010, Nikau Reserve, Chatham Island, Chatham Islands, collector P. Bradbury. All specimens are deposited in the in New Zealand Arthropod Collection at Landcare Research, Auckland, New Zealand.

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