

Miomantis caffra, a new mantid record (Mantodea: Mantidae) for New Zealand

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Abstract

A Southern African mantid, *Miomantis caffra* Saussure, is recorded as being established in New Zealand, and is distinguished from the only other New Zealand species, *Orthodera ministralis* (Fabricius).

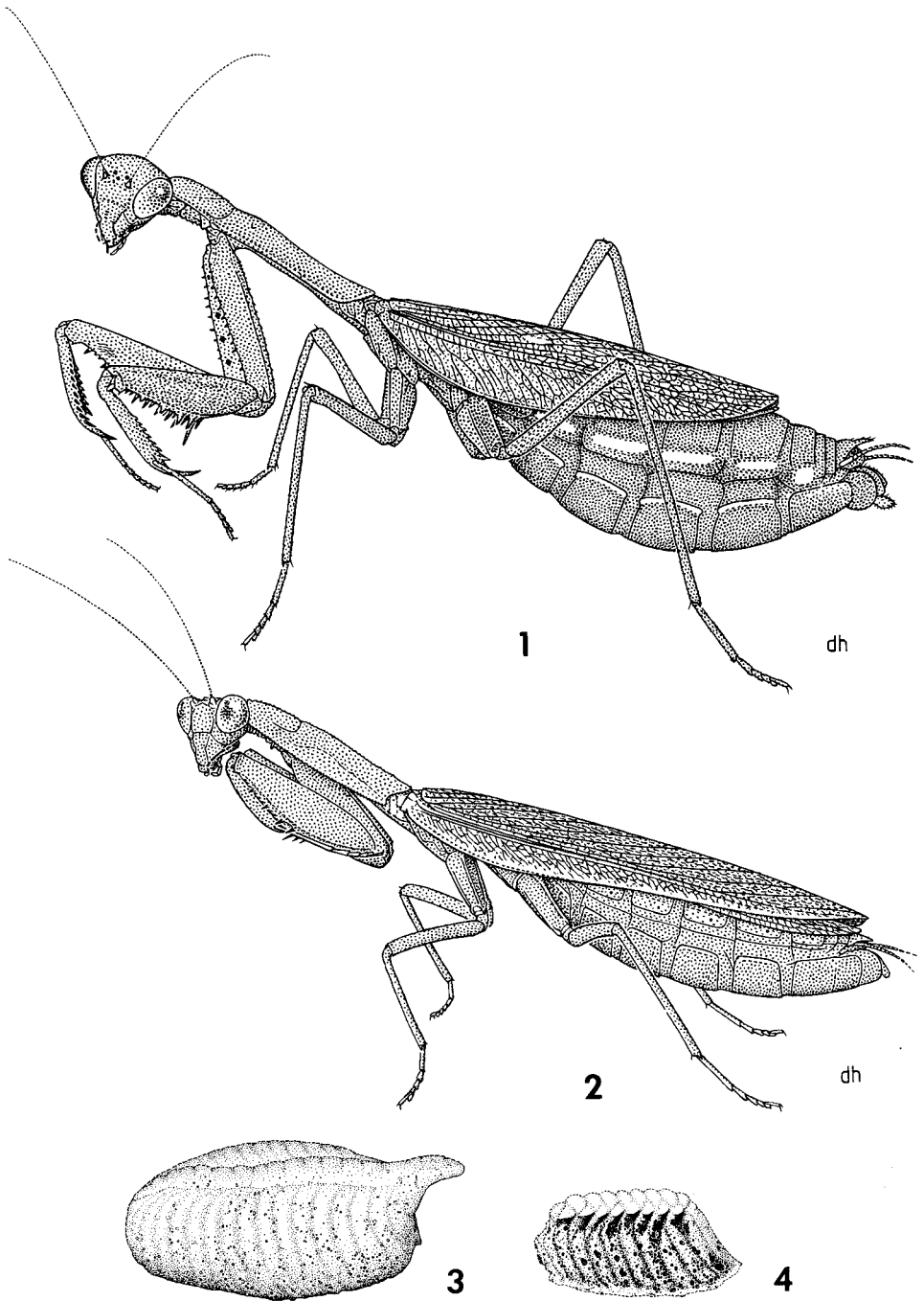
Keywords: Mantodea; Mantidae; *Miomantis caffra*; new record.

There are now two species of mantid established in New Zealand — *Orthodera ministralis* (Fabricius, 1775) (Fig. 1) and a Southern African species, *Miomantis caffra* Saussure, 1871 (Fig. 2). The first specimens of *Miomantis caffra* to be found here were nymphs which were collected by an Auckland school boy, Richard Cuthbert, at his home in Highfield Street, New Lynn (36° 55' S, 174° 41' E) during February 1978. These were reared to adulthood and a colony based on them established and maintained by the Systematics Section, Entomology Division, DSIR.

The initial identification of the African mantid caused problems as the specimens were unlike any Australian or Pacific species examined. Finally Dr A. Kaltenbach, Naturhistorisches Museum, Vienna, identified specimens as a common Southern African species, *Miomantis caffra*. One can only speculate as to how *Miomantis* arrived in New Zealand and, indeed, how long it has been established here. Perhaps oothecae camouflaged on plant material, or amongst packing, may have been the means of entry. In any case, the species seems to be permanently established and gradually increasing its range throughout the Auckland metropolitan area. It seems to be well able to survive the rigors of the climate, and so may possibly be able to disperse much more widely — perhaps over much of the North Island. Fortunately it is not a pest species.

Miomantis caffra belongs in the subfamily Mantinae, whilst *Orthodera ministralis* is in the subfamily Orthoderinae. The two species are very different and may be distinguished as follows:

CHARACTER	<i>Miomantis caffra</i>	<i>Orthodera ministralis</i>
Ootheca	Relatively wide, 12.0-28.0mm long, rounded sides, soft creamy brown, and with a terminal handle-like extension of the opercular band (Fig. 4). Hatching not synchronised, nymphs from one ootheca emerge over a period of some weeks and even over two seasons: perhaps this species has a facultative diapause.	Narrow, 11.0-19.0 mm long, flat-sided, dark brown, and without a terminal extension (Fig. 3). Hatching synchronised, nymphs from one ootheca emerge simultaneously.
Nymphs	Green or brown, limbs mottled, body often longitudinally striped, tip of abdomen up-curved.	Uniform green, tip of abdomen straight.
Adults	32.0-50.0mm long, pale green or straw-brown, occasionally with pink or purplish colouration near base of fore-wing; hind-wings green or bright yellow. Pronotum considerably narrower than head, occupying approximately 1/3 of body length, rounded dorsally and swollen over the leg attachment.	34.0-46.0mm long, uniform green, very rarely bright yellow (Bennett 1984); hind-wings hyaline and pale green. Pronotum and head similar in width, former occupying approximately 1/4 of body length, ridged dorsally and straight-sided.



Figs 1-4. 1,2. Adult female in typical pose (2.5 × natural size): 1 *Miomantis caffra*, 2 *Orthodera ministralis* 3,4. Oothecae (2 × natural size): 3 *Miomantis caffra*, 4 *Orthodera ministralis*.

	Eye-spot on inner surface of fore-femur absent, 2 dark pigment patches present.	Conspicuous vivid blue/black eye-spot present on inner surface of fore-femur, other dark pigment patches absent.
	Abdomen of gravid female extends well beyond wings.	Abdomen of gravid female does not extend beyond the wings.
	Sexual dimorphism marked, males smaller and more slender than females, antennae longer, fore-wings hyaline except for costal region.	Sexual dimorphism slight, males slightly smaller than females, otherwise very similar.
Behaviour	Very active and aggressive, males usually eaten immediately after copulation.	Placid, males usually survive copulation.

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REFERENCE

BENNETT, B. G. 1984. Blue, red, and yellow insects. *New Zealand entomologist* 8:88-90.