

Alain RATNADASS & Sean MOORE. – *Citrus spp.* (Rutaceae), cited for the first time as a host plant for *Eurystylus capensis* (Hemiptera, Miridae)

Mirid plant bugs of the genus *Eurystylus* Stål, 1871, have been reported as major pests of Sorghum [*Sorghum bicolor* (L.) Moench] in West and Central Africa (WCA), and to a lesser extent of Castor bean (*Ricinus communis* L.) in Southern Africa (STONEDAHL, 1995). It is now recognized that the main species causing damage to Sorghum in the former region is *Eurystylus oldi* Poppius, 1912, as all other species reported have been recognized since either as synonyms or as misidentifications (RATNADASS *et al.*, 1994; STONEDAHL, 1995). However, the occurrence of another species causing minor damage to Sorghum in West Africa and South Asia, namely *E. bellevoeyi* (Reuter, 1879), is also recognized. While distribution of *E. oldi* is virtually limited to Sub-Saharan Africa and its host range is rather narrow, distribution of *E. bellevoeyi* encompasses the whole African continent, the Indian Ocean islands, Southern Europe, the Arabic peninsula and South Asia (MATOCCO & STREITO, 2013). It was reported on a broad range of hosts, particularly Sorghum in South Africa (KRUGER *et al.*, 2008) and *Gynandropsis gynandra* (L.) Briq. in Niger (RATNADASS *et al.*, 2012).

*Eurystylus oldi* was not considered a pest of Sorghum in South Africa, but of Castor bean and Sunn hemp (*Crotalaria juncea* L.) in Mozambique (MALDÈS & RATNADASS, 1998). *Eurystylus rubroscutellatus* Odhiambo, 1958, was also reported from Southern Africa, but with an unknown host association. In South Africa, besides *E. bellevoeyi* (see above), *E. capensis* (Distant, 1904) was recorded in the Eastern Cape (King William's Town) and in Pretoria, (STONEDAHL, 1995).

However, it is only during the last few years, that this latter species has been observed on citrus (all commercial types excluding lemons), and to be causing notable damage to citrus blossoms in the Eastern Cape Province. It was observed that the adults and late instar nymphs fed on the closed citrus blossoms, causing yellow/brown lesions, leading to the blossoms prematurely dropping off. There have been claims of yield reduction. Both adults and juveniles were collected from Avoca Farm (33°28'42"S - 25°35'43"E) in the Sundays



Fig. 1-3. – 1, An adult of *Eurystylus capensis* (Distant) on a citrus blossom. – 2, A 4<sup>th</sup> instar nymph of *E. capensis* on a closed citrus blossom with droplet of yellow exudate where it has fed. – 3, Extensive damage on closed citrus blossoms, later translating into yellow/brown lesions, leading to the blossoms prematurely dropping off the tree.

River Valley of Eastern Cape Province in South Africa on Navel orange trees on 7 October 2013. The presence of nymphs (3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> instar) on the blossoms indicates that these bugs are breeding in the trees. In fig. 2-3, one can see where they have inserted their proboscises into the closed blossom, which then leads to the blossom dropping off the tree.

This is the first time that a species of the genus *Eurystylus* has been reported as a fruit tree pest, and being able to breed in a fruit tree. Adults of *E. oldi* (but not nymphs) have previously been found on mango blossoms in West Africa, but they were not reported to cause any damage (AJAYI & AJIBOYE, 1997). Previously, only *Croton megalobotrys* Müll. Arg. and *Vitex agnus-castus* L. shrubs have been reported as hosts of *E. capensis* (in Pretoria, South Africa), sheltering both adults and nymphs of the species (STONEDAHL, 1995). Further observations are needed on citrus to quantify the damage caused, to check whether other species of *Eurystylus* are involved, and to identify other potential alternate hosts of *E. capensis* in the region [e.g. *Croton megalobotrys*, *Vitex agnus-castus*, or even *Ricinus communis* (RATNADASS *et al.*, 1997)], and to inspect the same for possible presence of bugs of other *Eurystylus* species, e.g. *E. oldi* and *E. bellevoeyi*.

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