

Factsheet *Ceratitis bremii* Guérin-Méneville

Original name: *Ceratitis bremii* Guérin-Méneville, 1843: 199.

Vernacular name: none

(updated April 29th, 2020)

Formal redescription (after De Meyer, 1996)

Body length: 5.88 (5.0-7.0) mm; wing length: 6.25 (5.5-7.0) mm.

Male

Head. Antennal segments yellow to yellow-orange. Third antennal segment twice as long as second segment. Arista with basal third yellow, otherwise dark. Frons pale to yellow ground colour, silvery over entire length; bare, no distinct hairs. Ocellar triangle dark. Face pale; with median yellow band. At antennal socket also with horizontal yellow band, sometimes both bands almost joining. Occiput moderately swollen below, pale whitish. Chaetotaxy normal for subgenus.

Thorax. Ground colour of mesonotum pale with orange tinge; no distinct spots, three poorly defined darker stripes from anterior margin to dorsocentral setae, darker area between dorsocentral setae and prescutellar acrostichal setae, these markings not always distinct. Postpronotum same colour as centre of mesonotum. Chaetotaxy normal for subgenus. Two anepisternal bristles. Mesonotum with pale pilosity. Anepisternum completely pale pilose. Scutellum white basally, otherwise yellow with apical markings black; basally without dark spots, only slight darker coloration.

Legs. Yellow; setation typical of subgenus, mainly pale especially on femora. Posterior row on fore femur pale.

Wings. Bands with yellow markings extensive. Banding, setation and venation normal for subgenus. Marginal band continuous (in one specimen weakly interrupted); discal band joined with marginal band; cross-vein r-m before middle of discal cell; vein R₁ ending beyond cross-vein r-m.

Abdomen. Pale yellow, with weakly defined spots. Pattern of spots and setation normal for subgenus.

Female

As male except for the following characters: Frons yellower. Face with median band indistinct. Marginal band partly interrupted at vein R₁. Oviscape shorter than abdominal terga 3-6.

Encyclopedia of Life link: <http://eol.org/pages/726759/overview>

DNA barcoding

Multiple reference DNA barcodes from the species distribution are available on the Barcode of Life Data Systems (BOLD) at :

http://www.boldsystems.org/index.php/Taxbrowser_Taxonpage?taxon=Ceratitis+bremii&searchTax=
(accessed May 2020)

DNA barcoding might be considered as a fairly suitable tool for the molecular identification of *C. breinii*, regardless the fact that the BINs in which this species is represented, also include a few unidentified / possibly misidentified reference sequences

Host plant list

It is a polyphagous species recorded from a limited number of commercial and wild hosts. Throughout its range it is recorded from the hosts listed in the table below.

PlantFamily	PlantLatinName	PlantCommonNameEnglish
Anacardiaceae	Mangifera indica	mango
Dracaenaceae	Dracaena fragrans	
Sapotaceae	Pouteria alnifolia	
Sapotaceae	Pouteria altissima	

Additional information on host records and associated specimens can be found on :
<http://projects.bebif.be/fruitfly/taxoninfo.html?id=9>

Impact & management

It occurs in limited numbers in mango orchards in Benin (Vayssières et al., 2015) as well as in citrus orchards (Vayssières et al., 2010) but exact figures on its infestation rate and impact on this or other hosts are not available.

Management for this species is, as for most fruit fly pests, most efficient using an IPM (Integrated Pest Management) program, including aspects such as orchard sanitation, bait sprays, mass trapping among others. General reviews on the current IPM components applied in Africa can be found in chapters 13 to 20 of Ekesi et al. (2016).

No SIT (Sterile Insect Technique) application specifically for this species has been developed in Africa.

Attractants & trapping

Both sexes can be attracted by protein bait products such as liquid protein baits and three component Biolure.

Male flies can be attracted by methyl eugenol

General information on trapping, types of traps, lures and required density of trapping stations can be found in IAEA (2013), Shelly et al. (2014), and Manrakhan (2016).

Distribution

Ceratitis bremii is reported from a number of West African (from Senegal to Cameroon) and East African (from eastern part of DRC to Kenya and Tanzania) countries. Not established outside mainland Africa.

Distribution map for Africa, based upon specimen records with georeferences is available at:

<http://projects.bebif.be/fruitfly/taxoninfo.html?id=9>

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