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A Note on the Occurrence of Mango Thrips, *Scirtothrips mangiferae* Priesner (Thysanoptera: Thripidae), Infesting Mango Seedlings in Khartoum State, Sudan

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Abstract: - Mango thrips, *Scirtothrips mangiferae* Priesner (Thysanoptera: Thripidae), is a major pest of mangoes. It feeds on young shoots and leaves causing leaf malformation, stunting of growth and premature drop of leaves. These symptoms were observed on mango seedlings in the nursery at Shambat Research Station, Khartoum State, Sudan, during season 2009/2010. Immature stages and adults specimens of the insect pest and photographs of symptoms were sent to the Kuopio Natural History Museum, Finland, for identification. The insect pest was identified as *Scirtothrips mangiferae* Priesner. This is the first report of *Scirtothrips mangiferae* in Sudan.

Key words: Thysanoptera; *Scirtothrips mangiferae*; mango seedlings; malformation; Sudan

The genus *Scirtothrips* (Thysanoptera: Thripidae) consists of over 100 species, of which about 10 species are considered serious pests of crops throughout the tropics and subtropics, particularly under warm, dry conditions (Hoddle and Mound 2003). Several species of this pest are of economic importance and are of quarantine concern for many countries (Mound and Palmer 1981; Morse and Hoddle 2006). *Scirtothrips aurantii* Faure and related species have been reported as pests of citrus and mango in Sudan and South Africa (Schmutterer 1969), attacking mango particularly when grown close to citrus trees (EPPO/CABI 1996; Grove *et al*.2000). The Mediterranean mango thrips, *Scirtothrips mangiferae* Priesner, was recorded in Egypt, causing leaf-curling when occurring in large numbers (Hassan 1956). It is the most damaging pest of mangoes in Egypt and Israel since 1975 (Mound and Palmer 1981; Venezian and Ben-Dov 1982).

Scirtothrips species are small (1.5- 2 mm in length), pale, yellow and active thrips. The adult of the mango thrips (*Scirtothrips mangiferae*) is

characterized by its dark wings (Mound and Palmer 1981). The larvae and adults damage new growth of mango seedlings by sucking the sap from the epidermis of the young leaves leading to curling along the midrib, malformation and premature drop and stunting of growth and much shorter twigs of infested shoots (Venezian and Ben-Dove 1982).

Information given in this note was gathered to gain more knowledge about this pest species. In 2009/2010 season, mango seedlings were grown in a nursery at Shambat Research Station, Khartoum North, Sudan. They showed the above - mentioned symptoms. The seedlings and the adults and immature stages of the insect pest were examined, using a digital microscope (Digital Blue QX5 computer microscope) (www.digiblue.com).

The percentage of infested mango seedlings in the nursery was 83% - 100%. The stunting of growth and leaf malformation of the seedlings (Fig.1) were typical of the symptoms caused by *Scirtothrips* spp. on mangoes. According to Dr. Laurence A. Mound (personal communication), identification to the species level needs to be confirmed by adults and impossible with larval stages. Thrips specimens, collected from mango seedlings, kept in ethanol 70% and 1% glycerine, were sent to the Kuopio Natural History Museum, Finland, for identification. According to the identification of adult stage (Fig. 2), using Richard zur Strassen (2003) key, this species matched *Scirtothrips mangiferae*. This is the first report of *Scirtothrips mangiferae* Priesner on mango (*Mangifera indica* L.) seedlings in Khartoum State, Sudan.

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Fig. 1. Stunted growth and malformation of leaves of mango seedling

Fig. 2. Adult stage of mango thrips

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مجلة جامعة الخرطوم للعلوم الزراعيه: المجلد التاسع عشر – العدد الثاني 2011م

وجود تربس المانجو لأول مرة على شتول المانجو بولاية الخرطوم، السودان

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المستخلص:- تعد حشرة تربس المانجو من أهم آفات المانجو. تتغذى الحشرة الكاملة واليرقات علي السيقان والأوراق الصغيرة مما يؤدى إلي إعاقة النمو وتشوه الأوراق وتساقطها مبكرا . لوحظت هذه الأعراض على شتول المانجو بمشتل محطة بحوث شمبات بولاية الخرطوم، السودان، خلال موسم 2010/2009. جمعت عينات من جميع أطوارالحشرة وصور لاعراض الإصابة وأرسلت إلى متحف التاريخ الطبيعي، بكيبو، فنلندا، للتصنيف، حيث صنفت بتربس المانجو (*Scirtothrips mangiferae* Priesner).. يعد هذا أول رصد للحشرة على شتول المانجو بالسودان.