



SHORT COMMUNICATION

Record of cashew thrips species in the Konkan region of Maharashtra**Vinay Vishnu Parab**

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ABSTRACT

Cashew is familiar in most households of several countries of the world today because of its delicious, pleasant taste and nutritive value. Botanically, it is *Anacardium occidentale* L., belonging to family Anacardiaceae. The production of cashew nut is very low as compared to its increasing demand in India as well as in Maharashtra. There are many constraints attributed to low yield. The attack by insect pests is one of them. About 151 insect pests have been reported to inflict damage to cashew during different stages of its growth. The thrips are one of the most destructive pests of cashew. Present Investigation during PG studies at Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, (Agricultural University) Dapoli, Dist. Ratnagiri (M.S.) during 1999-00 revealed that four species of thrips occurred on cashew in the Konkan region. These included *Scirtothrips dorsalis* Hood, *Thrips hawaiiensis* (Morgan), *Selenothrips rubrocinctus* (Giard) and *Haplothrips tenuipennis* Bagnall. The former three species belonged to sub-order Terebrantia, while the last to Tubulifera. This was the first record of different species of species of thrips on cashew in the state of Maharashtra especially in the Konkan region where cashew has been cultivated intensively.

KEYWORDS: Cashew, *Anacardium occidentale* L, *Scirtothrips dorsalis* Hood, *Thrips hawaiiensis* Morgan, *Selenothrips rubrocinctus* Giard, *Haplothrips tenuipennis* Bagnal

INTRODUCTION

Cashew is familiar in most households of several countries of the world today because of its delicious, pleasant taste and nutritive value. Botanically, it is *Anacardium occidentale* L., belonging to family Anacardiaceae. It is a native of Southeastern Brazil and it has been introduced in India during sixteenth century by Portuguese where it became an important commercial crop.

In India, Kerala, Karnataka, Goa, Maharashtra, Tamil Nadu, Andhra Pradesh, Orissa and West Bengal are the states where cashew is grown over an area of 8.93 lakh hectares with an annual production of 6.95 lakh metric tones [1]. In the state Of Maharashtra, cashew cultivation is restricted to the Konkan region occupying an area of 1.70 lakh hectares with rank first in an annual production of 2.25 lakh metric tones of nuts in 2008-09 with average productivity of 1500 Kg per hectare (Statistics by, DCCD) Cashewnut has tremendous demand in foreign market and earned foreign exchange amounting to Rs.2631.78 crores through the export of kernels, shell liquid and allied products in 2008-09 [1].

The production of cashewnut is very low as compared to its increasing demand in India as well as in the overseas. There are many constraints attributed to low yield. The attack by insect pests is one of them. About 151 insect pests have been reported to inflict damage to cashew during different stages of its growth and development [2]. The pest inflicts damage to leaves, inflorescence, nuts and apples.

The thrips are one of the most destructive insect pests of cashew, no systematic work has so far been undertaken on the aspects related to this pest .which is very much needed for developing a suitable pest control strategy. The present piece of work was therefore undertaken.

MATERIALS AND METHOD

To record the different species of thrips infesting cashew in the Konkan region, a large mixed population of larvae of different species was collected during the field survey in the Konkan region during 1999-2000. The larvae were separated with help of 10 X hand lens into different groups based on certain characters like body colour, presence Harishchandragad-Kalsubai Wild Life Sanctuary were tested in *in vitro* by poisoned food technique to know there

inhibitory effect on the growth of selected pathogen. It was isolated from wilted roots of chili. Surface sterilized pieces of red bands and form of abdomen etc. in common. Of course, it required a lot of practice under microscope. The larvae of the respective group were reared up to adult emergence on a vegetative shoot and flowering panicle enclosed in a 50 cm long and 30 cm broad muslin cloth bag in the field. The adults were preserved in 70 percent alcohol in a small glass vial and taxonomically identified up to species level at the Zoological Survey of India, Western Regional Station, Akurdi, Pune, Maharashtra.

RESULTS AND DISCUSSION

Investigations revealed that four species of thrips occurred on cashew in the Konkan region. These included *Scirtothrips dorsalis* Hood, *Thrips hawaiiensis* (Morgan), *Selenothrips rubrocinctus* (Giard) and *Haplothrips tenuipennis* Bagnall. The former three species belonged to sub-order Terebrantia, while the last to Tubulifera. (Table.1) This was the first record of different species of species of thrips on cashew in the state of Maharashtra. The present observations were in agreement with those of the earlier workers recorded in other states, Sundararaju [3] recorded occurrence of *S.dorsalis* on cashew in Goa. Further, it was also reported by Raju [4, 5] in the eastern dry zone and maidan parts of Karnataka whereas the red banded thrips, *S. rubrocinctus* was observed to occur on cashew in the then Madras state by Abraham [6] for the first time. Ananthakrishnan [7] recorded *Thawaiiensis* on cashew inflorescence in Tamil Nadu. However, there was no report of *H.tenuipennis* on cashew prior to this study.

Table 1 The thrips species recorded on cashew in the Konkan region are listed below

Sr.No	Scientific name	Order	Sub-order	Family
1.	<i>Scirtothrips dorsalis</i> Hood.	Thysanoptera	Terebrantia	Thripidae
2.	<i>Thrips hawaiiensis</i> Morgan	Thysanoptera	Terebrantia	Thripidae
3.	<i>Selenothrips rubrocinctus</i> Giard	Thysanoptera	Terebrantia	Thripidae
4	<i>Haplothrips tenuipennis</i> Bagnal	Thysanoptera	Tubulifera	Phlaeothripidae

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