

**Incidence of Scarlet Mite, *Brevipalpus phoenicis* (Geij.) on *Sesamum* in West Bengal**

Recently, while surveying the mites associated with oilseeds of West Bengal during August 1972, *Brevipalpus phoenicis* (Geij.) a new mite pest of sesamum (*Sesamum indicum*) in this State was noticed. This mite is commonly known as scarlet mite because of its colour and has been reported earlier in India on tea<sup>1</sup> and rose<sup>2</sup>.

All stages of this mite were seen on the under-surface of leaves and on the upper surface as well (in the case of heavy infestation). Because of continuous sucking the plant sap, light brownish spots appeared at the points of feeding which later turned light to deep brown. All the attacked leaves became twisted and folded longitudinally. Raised gall-like swellings appeared in some of the infested leaves but whether these were caused because of

feeding of this mite is not known with certainty. Besides leaves, they also attacked the young twigs and pods which turned reddish brown and looked sickly.

One species of thrips and a species of *Amblyseius* were found feeding on all the stages of this mite.

The author is grateful to Dr. A. P. Kapur, Director, Zoological Survey of India, Calcutta, for the facilities.

Zoological Survey of India.

S. K. GUPTA.

34, Chittaranjan Avenue,

Calcutta-12, February 11, 1974.

1. Das, G. M., *Two and a Bud, Cinnamara*, 1961, 8, 3.
2. Ghai, Swaraj and Menon, M. G. R., *Entomologist Newsletter*, 1970, 1, 37.

---

---

## REVIEWS AND NOTICES OF BOOKS

---

---

**Hadron Physics at Very High Energies.** By David Horn and Fredrik Zachariassen. (W. A. Benjamin, Inc., Advanced Book Program, Reading, Massachusetts), 1973. Pp. xvii + 378. Price \$ 17.50.

The above book under review appears in the lecture note and reprint series. The authors have discussed the currently intriguing problems that crop up in the interactions of hadrons at very high energies. It was expected that asymptotic regime would be attained at energies up to a few GeV. But many complicated structures appear in the cross-sections and angular distributions, etc. The expectation that the cross-section will become asymptotically flat near a few hundred GeV has not been realised yet. The authors review the existing experimental results and discuss the various theoretical models and analyses. These include the Regge pole analysis, field theoretical and multiperipheral models and various other models such as the droplet model, statistical models, diffraction models and hybrid models. These discussions are helpful for understanding the fundamental theoretic basis of high energy physics. However, they have not included the hadron model and the dual models. The reason given is that these give only qualitative results and the latter does not represent Pomeron effects.

There are five appendices which give mathematical details of some useful theorems.

To sum up the book has appeared in time and will be helpful to those doing research in very high energy physics. Since it is addressed to research

workers in this field, the level is rather advanced. The reviewer feels that the book will be valuable for active research workers in this field.

K. P. SINHA.

**Basic Principles of Plasma Physics: A Statistical Approach.** By S. Ichimaru. (Addison-Wesley/W. A. Benjamin, Inc., Advanced Book Program, Reading, Massachusetts 01867), 1973. Pp. xviii + 324. Price \$ 19.50.

This is one of the latest books in the subject. Therefore one expects it to contain the latest developments in the statistical methods of plasma theory. In this regard the author has done only a partial job, otherwise, the book is well written. Though, some chapters contain only the usual stuff that can be found in other books like *Plasma Kinetic Theory* by Montgomery and Tidman, but chapters 9 to 11 on Fluctuation, relaxation, and plasma turbulence have been written with a lot of care and understanding, even though here the reader may find some overlap with 'Methods of Nonlinear Plasma Theory' by Davidson and 'Fluctuation in Plasmas' by Sitenko. On page 278, one finds three-wave interaction represented by a diagram of many body quantum theory, but hardly any treatment of the technique is found in the entire book except in Appendix I that, incidentally, contains only one reference that of Pines. Reference to other works in the area as applied to plasma theory of thermonuclear interest is missing.