## Short Communication

## Incidence of *Elasmolomus sordidus* Fabricius (Lygaeidae: Hemiptera) on Pearl Millet in Arid Rajasthan

S.K. Verma

Central Arid Zone Research Institute, Jodhpur 342 003, India

Lygaeid bugs are generally polyphagous, but exhibit certain level of preference for their food plants. In arid regions of Rajasthan, *Spilostethus pandurus* is a very common but relatively less fastidious species feeding on foliage of diverse vegetation in many families such as Cucurbitaceae, Combretaceae, and Compositae. Other lygaeid bugs primarily occur as seed bugs. *Oxycaraenus laetus* bugs prefer plants of Malvaceae (cotton, okra and hollyhock), but are reported to infest pearl millet also (Verma, 1980).

For the last three decades, another commonly occurring lygaeid, Elasmolomus sordidus seemed to be almost confined to sesame. Although Sharma et al. (1990) reported its occurrence on sesame in Jabalpur (Madhya Pradesh) only in 1990, it is an established pest of sesame, many African and Asian countries including India. Hassan (1995) regarded this seed bug as a growing serious pest problem considerably limiting the production of sesame in Sudan. In Bangladesh, it occurs abundantly (during February) on groundnuts (Islam et al., 1983) and soybean (Ali, 1988). In South India, E. sordidus is known to occur as a seed bug also on millets and groundnut (Nair, 1976) and Thangavelu (1985) observed it to feed upon and carry the seeds of Capsicum annum to considerable distance, as is known in the case of sesame. Mukhopadhyay and Saha (1995) reported the bug to thrive well on groundnut, wheat and Ficus religiosa, a non-economic host. Fourth instar larvae showed the highest consumption and weight gain on groundnut seeds

In arid regions of Rajasthan, *Elasmolomus* sordidus gets carried to threshing floors with harvested crops of sesame and pearl millet. Adults are seen feeding on threshed as well as sesame seeds. Population of the bug is known to decrease during summer months and the bug undergoes

aestivation under the sesame or other straw, cracks and cool shelters.

E. sordidus was observed to occur as a pest on many lines of pearl millet breeding material under and condition during kharif 2003. Besides having settled on ears, nymphs and adults stayed gregariously in good numbers (9-20) in the leaf sheath and under leaves. The number of bugs plant-1 was >20 and up to 45 in some cases. A high number of nymphs and their sedentary occurrence, along with adults, indicated its active breeding of the bug on pearl millet. However, oviposition on pearl millet plants could not be confirmed in field observations. Field occurrence and feeding of Elasmolomus sordidus on pearl millet foliage appears to be a new record from this region.

## References

- Ali, M.I. 1988. A survey of the insect pests of soybean in northern Bangladesh, their damage and occurrence. *Tropical Pest Management* 34(3): 328-330.
- Hassan, A.E. 1995. A study on the biology, ecology, behaviour and assessment of the damage of the sesame seed bug *Elasmolomus sordidus* (Hemiptera: Lygaeidae) in Sudan [Sudan]. *M.Sc. Thesis*, Faculty of Agriculture, University of Khartoum. Shambat (Sudan).
- Islam, W., Ahmed, K.N., Nargis, A. and Islam, U. 1983.

  Occurrence, abundance and extent of damage caused by insect pests of groundnut (*Arachis hypogaea L.*).

  Malaysian Agricultural Journal 54(1): 18-24.
- Mukhopadhyay, A. and Saha, B.1995. Nutrient requirement of seed bug (Elasmolomus sordidus) (Heteroptera: Lygaeidae) on four host seeds. *Indian Journal of Agricultural Sciences* 65(2): 154-155.
- Nair, M.R.G.K. 1976. *Insects and Mites of Crops in India*. Indian Council of Agricultural Research, New Delhi, 408 p.
- Sharma, S., Khatri, A.K. and Shrivastava, S. 1990. A new record of lygaeid bug, *Elasmolomus sordidus* Fabr. on *Sesamum* in Jabalpur, Madhya Pradesh. *Indian Journal of Entomology* 52(4): 706-707.

76 VERMA

Thangavelu, K. 1985. Ethology of some rhyparochromines (Lygaeidae: Heteroptera: Insecta). *Journal of the Bombay Natural History Society* 82(1): 138-143.

Verma, S.K. 1980. Field pests of pearl millet in India. Tropical Pest Management 26(1): 13-20.