

DOI: 10.55278/FUYS5625

First report of painted bug, *Bagrada hilaris* on pearl millet in Anand, Gujarat, India***Kahkashan Wali¹, C. B. Varma², D.B Sisodiya¹***¹Department of Agri. Entomology, BACA, AAU, Anand, Gujarat, 388110, India²Department of Agri. Entomology, COA, AAU, Vaso, Gujarat, 388110, India**Corresponding author: chiragvarma@aau.in, kahkashan.wali123@gmail.com**

Pearl millet (*Pennisetum glaucum* L.) also known as bulrush, cattail, candle or spiked millet is an annual grass of the family Poaceae, widely grown in Africa and India as a grain and forage crop. A study was conducted to identify the pests infesting pearl millet crop at Entomology farm, Department of Entomology, B. A. College of Agriculture, Anand, (22.57 °N, 72.93 °E) Gujarat, India during summer of 2021. During the field visit, a hemipteran bug was observed on pearl millet. After collection, killing and pinning, photos were taken. The bagrada bug identified was painted bug, *Bagrada hilaris*, a true bug in the order Hemiptera, and more specifically is a stink bug in the family Pentatomidae. It was first reported in the United States on June, 2008 in Los Angeles, California (Reed *et al.*, 2013).

The study conducted on pearl millet revealed the serious infestation of *Bagrada hilaris* from vegetative to reproductive stage of the crop. Different life stages were observed

including eggs, five nymphal instars, adults as well as the mating pairs on different parts of the plant *viz.*, leaves, stems, ligules and ear heads.

Both adult and nymphal stages feed on the host plant. Adult females feed longer and cause greater damage than males do. Feeding damage by bagrada bug on leaves is characterised by star shaped chlorotic lesions that may become necrotic. It also damages stem and developing ear heads resulting in reduced yield. This investigation concluded that bagrada bug was first time observed on pearl millet in Anand, Gujarat, India in an aggregate form on pearl millet crop and adversely affected the plant growth, yield and market value.

We are thankful to Dr. Hemant Ghate, Indian taxonomist, Department of Zoology, Pune, India for identifying the painted bug, *Bagrada hilaris*.



Fig. 1. Eggs laid on leaves in groups; Fig. 2. Third instar nymph of painted bug; Fig. 3. Adult of painted bug



Fig. 4. (A) Infestation appeared on leaves as star shaped lesions (B) mating adults on ear head of bajra appeared (C) eggs, nymphal instars and mating adults observed on ear head

References:

Reed, D. A., Palumbo, J. C., Perring, T. M., and May, C. 2013. *Bagrada hilaris* (Hemiptera: Pentatomidae), An Invasive Stink Bug Attacking Cole

Crops in the Southwestern United States, *Journal of Integrated Pest Management*. **4 (3)**: pp. 1-7.

MS Received 02 January 2022

MS Accepted 18 February 2022