

## A new record on the infestation of a millipede in agricultural crops of Kerala

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Millipedes are known to be detritivorous organisms, feeding on decaying organic matter. These are considered as farmers' friends as they are involved in litter decomposition aiding in nutrient cycling and soil formation (Culliney, 2013). Even some of the millipede species such as *Arthrosphaera magna* are employed for compost preparation from plantation residues in Karnataka (Ashwini and Sridhar, 2006) and *Xenobolus carnifex* for composting the commonly available organic waste such as leaf litter, sugarcane trash, rice husk and saw dust in Tamil Nadu, India (Karthigeyan and Alagesan, 2011). Though their occurrence in agricultural fields and humid forest lands are common, they are not reported as serious pests in agricultural crops of Kerala.

In October 2021, the bitter gourd and cucumber crops cultivated in Vazhikkadavu, Panchayath (Latitude 11.377413°, longitude 76.352802°, elevation 158.41±8 m) Malappuram district, Kerala, had a heavy infestation of millipedes. The tender leaves of the crops were severely defoliated by feeding the leaf lamina, leaving only the veins. The millipedes were found resting beneath the weeds during day time, and they were actively feeding in large swarms on the crops during night. This pest defoliated seventy per cent of the plants, and they climbed to 75-90 cm height to feed on

the tender leaves. Around 5-7 millipedes were infesting each vine. The field sanitation was poor as the farmer could not perform timely weeding operations due to the continuous rains. The specimens of millipedes were collected from the infested field and were taxonomically identified as *Carlogonus gayathri* Sankaran and Sebastian, 2020.

The species was originally described by Pradeep M. Sankaran and Pothalil A. Sebastian in 2020, which was collected from Thrippalur, Palakkad district, Kerala (Sankaran and Sebastian, 2020). The specific epithet refers to the Gayathripuzha River, a tributary of Bharatapuzha River flowing through the Palakkad district. They reported that the species are seen during the onset of rains and inhabit the open ground system covered with dried leaves and debris. They described that the species is in brown and yellow mixed colour with a round shape, and it has 65 circles and 239 legs on its body which grows up to 133 mm and 55 to 59 small eyes on both sides of its body.

Detailed investigation on its potential to cause economic damage to the crops and their management is needed. The investigation on whether climate change causes a shift in the feeding behaviour of millipedes is also necessary.



**Fig. 1: Millipede, *Carlogonus gayathri* Sankaran and Sebastian, 2020**



**Fig. 2 Millipedes infesting bitter gourd**

## References

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