

Record of a new entomopathogenic fungus on sugarcane woolly aphid

In recent years, the sugarcane growing areas of Karnataka and Maharashtra have been threatened by the occurrence of notorious sucking pest, sugarcane woolly aphid, *Ceratovacuna lanigera*. The pest has caused considerable loss in both quality and quantity of sugarcane crop. Although

constant efforts involving both chemical and biological control methods are in progress to curb the pest activity, the results are not satisfactory.

However, natural occurrence of a new entomopathogenic fungus on sugarcane woolly aphid has paved a new avenue for

its control (Figure 1 *a, b*). The natural incidence of the fungus, which produces black spores was noticed for the first time in Sankeshwar area of North Karnataka during July 2005. Surprisingly, the fungus could spread over an area of 100 acres on its own within a span of one month and cause more than 90% pest control by inducing spectacular epizootics.

Fungus culture was collected from the infested field and purified culture was sent for identification to experts. The candidate fungus has been identified as *Acremonium zeylanicum* (Pech) Gams *et* Evans. This is the first ever record of the fungus on sugarcane woolly aphid. The fungus produces spores in large numbers during favourable conditions, such as high relative humidity (> 90%) and optimum temperature (27°C). Infective units of the fungus enter the host body through cuticle and cause death within a week. Preliminary trials conducted at Sankeshwar and Dharwad on the field performance of utilizing the fungus in the management of sugarcane woolly aphid have indicated strong positive results. However, detailed studies on different aspects of the fungus such as pathogenicity, field performance, mass production, etc. are under progress at Department of Agricultural Entomology and Plant Pathology, University of Agricultural Sciences, Dharwad.

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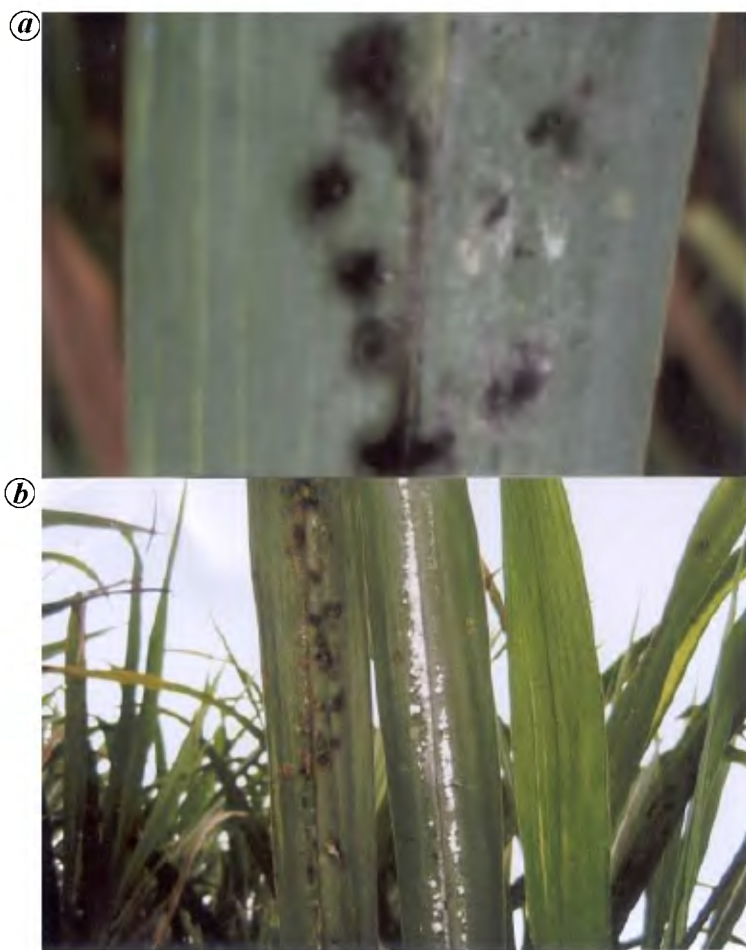


Figure 1. *a*, Sugarcane woolly aphid infected by *Acremonium zeylanicum* fungus.
b, Fungal (*Acremonium zeylanicum*) infected colonies of sugarcane woolly aphid.