

*purpurea* and by *Ustilaginoidea*' differing chiefly in their imperfect forms (italics are by the present authors). The smut-like conidia of *Ustilaginoidea virens* were given the name of brown gemmae by Gaumann, because on germination they produce secondary conidia as has been observed by several authors including Butler. This character is not duplicated in genus *Claviceps*.

As a result of their parasitization of the floral parts, chiefly ovaries, the two genera produce morphologically differing structures. In *Ustilaginoidea*, it is a pseudomorph, a velvety, dirty green hard knot which replaces the ovaries in rice panicles. The pseudomorph consists of a hard central core (closely interwoven packed hyphae) over which arises a white-yellowish layer succeeded by a middle orange-yellow layer and an olive-black outermost sporiferous layer<sup>1</sup>. Within this pseudomorph true sclerotia develop as was first observed by Hashioka<sup>1</sup>. In *Claviceps*, on the other hand, the sclerotia are naked and do not develop in any structure resembling the pseudomorph of *Ustilaginoidea*.

*Ustilaginoidea* as a genus has for long been recognized as a member of family Clavicipitaceae of Ascomycetes as evidenced in the work of Muller and vonArx<sup>3</sup>. Its disposition in dematiaceous Hyphomycetes<sup>5</sup> disregards the polymorphism that prevails in this genus as in the case in other genera of the family Clavicipitaceae. Singh and Dube<sup>6</sup>, without a critical assessment, have accepted Hashioka's transfer of the false smut of rice pathogen to *Claviceps*. However, as the foregoing discussion suggests the old name *Ustilaginoidea virens* (Cooke) Takahashi is a valid name. *Claviceps oryzae-sativae* Hashioka, therefore, should be treated as a synonym of *Ustilaginoidea virens*.

2 January 1987; Revised 18 May 1987

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### OCCURRENCE OF ROOT GRUB AS A PEST OF CARDAMOM (*ELETTARIA CARDAMOMUM MATON.*)

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SEVERAL insects, mites and nematodes are reported to be associated with damage to capsule, shoot, leaf, root and rhizome of cardamom<sup>1</sup>. Very recently an insect pest, identified as *Basilepta (Nodostoma) fulvicorne* (Jacoby), was recorded to cause damage to roots resulting in heavy yield loss. The adult is a small, metallic green, blue or cuprous beetle, 4 mm in length. The mature grub is short and stout with glassy white body having the characteristic 'C' shape when taken out from soil. It pupates in an earthen cell and emerges as an adult after pre-monsoon showers.

All stages of the grub have been identified as damaging the feeder roots, the feeding damage is in irregular patches along the length of the roots. The affected seedlings or the plants exhibit poor growth with the leaves becoming chlorotic. It is possible to reproduce the damage symptoms viz root damage and chlorosis in pot cultures.

*B. fulvicorne* has not been hitherto reported as a pest of cardamom and this is the first report as a serious pest. The pest has been recorded in most of the plantations in Kerala, Karnataka and Tamil Nadu.

Further studies are in progress on the bioecology and bionomics of *B. fulvicorne*.

The authors express their gratitude to Dr. M. L. Cox, Commonwealth Institute of Entomology, London for identifying the pest.

16 February 1987; Revised 19 June 1987

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