

molecular silver gave diethyl 1-4-diketo-2-3-dimethyl cyclohexane-2-3-dicarboxylate (III). Clemmensen reduction of (III) followed by hydrolysis gave desoxycantharidin (IV). Reduction of (III) by aluminum isopropoxide followed by etherification and hydrolysis by sulphuric acid gave cantharidin (I), m.p. 217°. Mixed m.p. of the synthetical cantharidin with an authentic sample from *Mylabris pusiulata*, kindly supplied by Dr. P. C. Guha (Indian Institute of Science, Bangalore) to whom our thanks are due, was also 217°. Further details will be published shortly.

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### CLAVICEPS PURPUREA (Fr.) Tul. AND A NEW SPECIES FROM SIMLA

PUSHKAR NATH AND PADWICK<sup>1</sup> recorded the presence of ergots on grasses at Simla, the hosts including *Brachypodium sylvaticum* Beauv. and *Oplismenus compositus* Beauv.

The fungus producing ergots on *Brachypodium sylvaticum* is *Claviceps purpurea* (Fr.) Tul.

A large number of *Brachypodium* ergots was found germinating in nature immediately below the plants at Simla on August 9th, 1942. These ergots measured 1.6 × 16 (1.4 - 2.0 × 7 - 35) mm. The stromata were purple or brownish yellow, slightly pitted or tuberculate, borne on a purple or brownish-yellow stipe, measuring up to 1.5 × 28 mm. The globose to subglobose capitula measured 2.8 (1.5-3.0) mm., and the ovate perithecia 147 × 259 (119-170 × 246-280) μ, asci 2.6 × 125 (2.4-3.6 × 81-173) μ and ascospores 98 (81-136) μ.

In 1942 successful attempts were made to inoculate rye and wheat with spores formed in potato dextrose agar cultures of the *Brachypodium* fungus. Ergots formed on rye, and eventually reached a maximum size of 2.5 × 13 mm., and were straight, furrowed, purplish-brown in colour, and hard at maturity. They were in every way typical of *Claviceps purpurea*. Those on wheat were smaller, measuring up to 4 × 10 mm.

In addition to the collection of germinating ergots of *Brachypodium sylvaticum*, a large number of germinating ergots from *Oplismenus compositus* was collected immediately beneath plants of that species on August 22nd, 1942. The ergots measured 1.3 × 6.4 (1.0-1.5 × 4-10) millimetres. The capitula were yellowish-green in colour, tuberculate, borne on a yellow stipe which measured up to 4.2 cm. in length. The diameters of the capitula varied from 1.0 to 1.6 mm. The perithecia measured 203 × 323

(170-229 × 280-357) μ; asci 2.6 × 178 (2.0-3.1 × 148-242) μ; and ascospores 145 (119-188) μ. Conidia found on ergots on the host plant were greenish coloured in mass, giving the sclerotia a greenish hue. Even singly they had a slightly green colour. They measured 3.8-8.4 (3.4-4.6 × 4.2-18.9) μ.

Pure cultures of the *Oplismenus* fungus were repeatedly obtained by surface sterilizing the sclerotia and plating on potato dextrose agar. Slow-growing cultures resulted, consisting of a much convoluted greenish-yellow mass, finally becoming darker green, and consisting largely of masses of spores which were somewhat smaller than those formed on the ergots, namely, 2.4 × 9.8 (1.6-3.8 × 3.3-12.6) μ.

On the basis of spore length, colour of stipe, and particularly the striking green colour exhibited by the fungus in all its stages, it differs from all known species of *Claviceps*, and is regarded as a distinct new species, to which is given the name *Claviceps viridis*.

*Claviceps viridis*, Padwick et Azmatullah,  
sp. nov.

*Sclerotium viridibus vel viride-nigris, cylindraceis, curvatis, 1.3 × 6.4 (1.0-1.5 × 4-10) mm. Stromatibus in quoque sclerotio quotcumque 4; stipitibus cylindraceis, flavis, ad 4.2 cm. longis, 0.5 vel 0.8 mm. diam.; capitulis globosis vel subglobosis, flavide-viridibus vel fuscis, tuberculosus, 1.0 vel 1.6 mm. diam. Peritheciis ovalis, ostiolatis papillaribus, 203 × 323 (170-229 × 280-351) μ; ascis cylindraceis, apicibus rotundatis, basibus attenuis, 2.6 × 178 (2.0-3.1 × 148-242) μ; ascosporidiis 145 (119-188) μ longis. Conidiis hyalinis vel palido viridibus globosis vel cylindraceis, strictis vel curvatis, 3.8 × 8.4 (3.4-4.6 × 4.2-18.9) μ.*

In terra, sub plantis *Oplismenorum compositorum* Beauv., leg. Md. Azmatullah, Simla, 25-8-42 (Typus). Statis conidicis et scleroticiis in ovarii *Oplismenorum compositorum*, leg. Pushkar Nath, Simla, Nov. 1942.

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<sup>1</sup> *Curr. Sci.*, 1941, **10**, 488.

### ON THE NEMATODE INDIANA GRYLLOTALPAE, GEN. et. SP. NOV. FROM GRYLLOTALPA SP.

HOST: *Gryllotalpa* sp.  
LOCATION: Gul.  
LOCALITY: Calcutta.

BASIR\* has recently founded four new genera of nematode worms obtained from *Gryllotalpa* sp. in the Aligarh district. At the time of examination of the gut contents of the insect in this laboratory four Oxyurid worms were collected and placed at my disposal. All the specimens except one have unfortunately been mutilated at the time of collection.

The worms collected are all female and small in size. The entire specimen measures 1.7 mm. in length. The lips are inconspicuous, behind which there is a number of broad