Fig. 1. Transverse section through worm and tumorous mass. Approx. ×12 magnification. Hematoxylin and eosin stained.

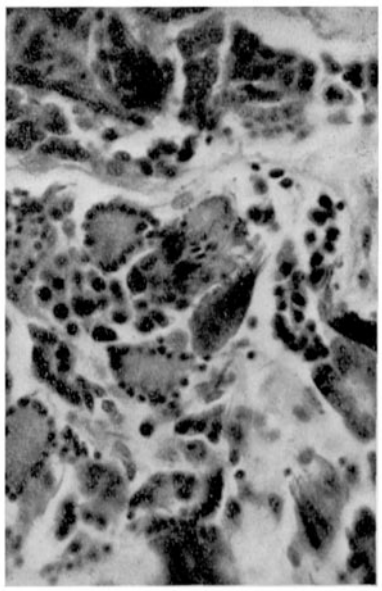

Fig. 2. Section of normal seminal vesicle contents containing clusters of spermatogenic cells at varying maturation stages. Approx. ×200 magnification. Hematoxylin and eosin stained.

aggregates of amoebocytes that sometimes occur in foreign body reactions or at sites of infection in earthworms.

Further studies will probably prove this to be a relatively rare neoplastic lesion for the earthworm. However, it will be of interest to determine if more common neoplasms such as benign fibromas and lipomas or malignant forms such as melanomas and sarcomas of vertebrates can occur in the phylum Annelida. Experiments with treatments of long duration are now in progress in an attempt to derive such tumors.

Zusammenfassung. Regenwürmer, die mit Methylcholanthren behandelt wurden, zeigten neoplastische Prozesse. Zwei verschiedene Zelltypen wurden gefunden: Einmal Spermatogonien mit ausgereiftem Sperma, daneben Zellen mit dichten Kernen, welche keinem normalen Zelltyp zugeordnet werden konnten.

R. L. HANCOCK[5]

Hulls Cove (Maine USA), December 7, 1964.

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A New Species of Protomycopsis from India

A purple leaf spot disease was repeatedly noticed on the leaflets of *Sesbania grandiflora* Pers. in the University Campus from September to October over the past few years. Initial symptoms appeared as small pale greyish-green spots on the pinnules, later turning greyish purple and opaque (Figure 1). These resembled those incited by a *Cercospora* species, which brought about premature defoliation of the host, while the spots turned dull purple on the withering leaflets. Examination of the infection spots indicated a species of *Protomycopsis* as the disease incitant. The chlamydospores developed abundantly in the intercellular spaces of the mesophyll obscuring the host tissues. They were globose to oval and cinnamon brown having a thick exospore ornamented with hyaline to yellowish tinged, bluntly conical processes which were sometimes discontinuous (Figure 3). Intercellular hyphae were still discernible, often appearing as tail-like appendages on the chlamydospores (Figure 2).

Occurrence of *Protomycopsis ajmeriensis* Gupta, reported on this host genus from Rajasthan, incites development of rough warts on the leaflets. Its chlamydospores possess reticulate walls with small areoles[1]. Other species inciting opaque purple spots on leguminous hosts as in the present case but possessing reddish brown warty chlamydospores have been reported from elsewhere in the country[2–5]. Comparative observations indicate that this

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fungus has no resemblance to any of the known species of *Protomycopsis* either in host symptoms or the spore morphology. It is therefore proposed as a new species in honour of Dr. M. J. THIRUMALACHAR, an eminent researcher and devoted student of fungi.

Protomycopsis thirumalacharii sp. nov. Infection spots on leaflets, few, brownish purple, opaque, 3–6 × 2–4 mm. Mycelium intercellular, septate, branched and mostly consumed in forming chlamydospores terminally. Mature chlamydospores abundant in the mesophyll, cinnamon brown, globose to oval, occasionally ovate, often with a short hyphal appendage and 18.3–25.4 μ in diameter with a mean of 23 μ. Exospore very thick (up to 2.5 μ) and ornamented with hyaline to yellowish, bluntly conical processes 2–6 μ high.

On living leaves of *Sesbania grandiflora* Pers. at Varanasi, U.P. on 21 September 1962. Leg. M. S. PAVGI., Type MSP No. 261.

Infectionis maculae in foliolis, rarae brunneolo-purpureae polyhedrales non-translucidae, 3–6 × 2–4 mm. Mycelium intercellulare septatum ramosum et vulgo consumptum in efformandis chlamydosporis terminaliter. Chlamydosporae maturae abundanter evolutae in mesophyllo, cinnamomo-brunneae, globosae vel ovales interdum ovatae saepe ornatae appendice hyphali brevi 18.3–25.4 μ diam. mediet. 23 μ. Exosporium crasissimum ad 2.5 μ et ornatum processibus hyalinis minutis conicis 2–6 μ altis.

Typus lectus in foliis viventibus *Sesbaniae grandiflorae* Pers. ad Varanasi die 21 septembri anni 1962 a M. S. PAVGI et positus in Herbarium sub numero MSP 261.

The type material of the species is being deposited in the Herbarium Crypt, Indiae Orient., Indian Agricultural Research Institute, New Delhi, and the Commonwealth Mycological Institute, Kew, England[6].

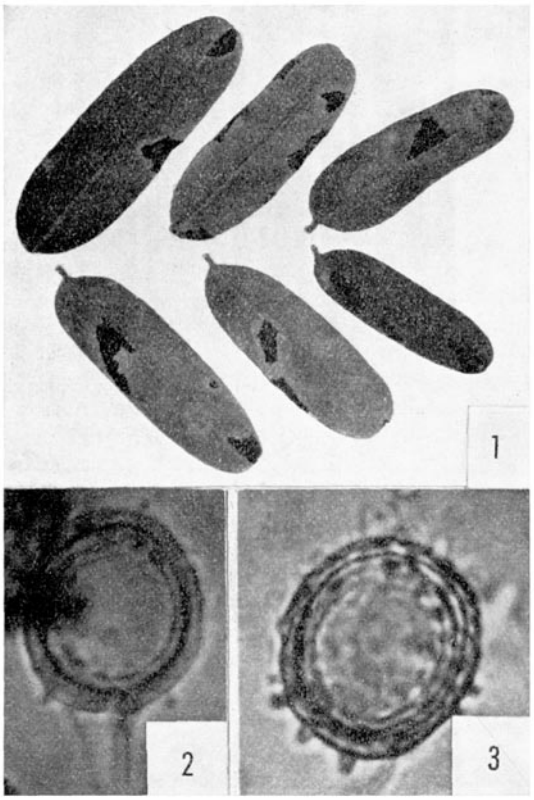

Fig. 1. Infection on the leaflets of *Sesbania grandiflora* Pers. Natural size.
Fig. 2. A chlamydospore with hyphal remnant. × 1200.
Fig. 3. Mature chlamydospore. × 1200.

Zusammenfassung. Vergleichende Untersuchungen des auf Blättern von *Sesbania grandiflora* Pers. vorkommenden Pilzes *Protomycopsis* aus Varanasi (Indien) ergeben eine bisher unbeschriebene Art, die von uns als *Protomycopsis thirumalacharii* Pavgi bezeichnet wird.

M. S. PAVGI

College of Agriculture, Banaras Hindu University (India), March 6, 1964.

[6] I am grateful to Rev. Dr. H. SANTAPAU, Director Botanical Survey of India, Calcutta, for kindly providing the Latin translation of the diagnosis.

Modifications of the Vestibular DC resting Potentials by Stimulation of the Efferent Vestibular System

Electric stimulation of the efferent vestibular system (EVS), close to the area of the Deiters nucleus, causes a distinct reduction of the action potentials of the contralateral vestibular nerve; sometimes this stimulation elicits also a discharge[1]. Direct demonstration of the efferent vestibular activity was later performed[2,3].

The purpose of this paper was to study the efferent influence on vestibular DC resting potentials (DC RP). 25 adult cats were tracheotomized and decerebrated precollicularly, sometimes also decerebellated. A small niche was then bored by microdrill in the petrous bone at the level of the crus commune. We were careful not to touch the wall of the membranous labyrinth at all. The vestibular DC RP were recorded with a Hewlett Packard microvoltmeter. Chlorided silver wires were used as electrodes, with a 0.15 mm diameter, insulated except at the tip. The active electrode was placed in the small niche at the level of the crus commune, and the indifferent electrode at a short distance upon the skull bone. To overcome the artifacts due to contact potentials[4], we used SCHMIDT and

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