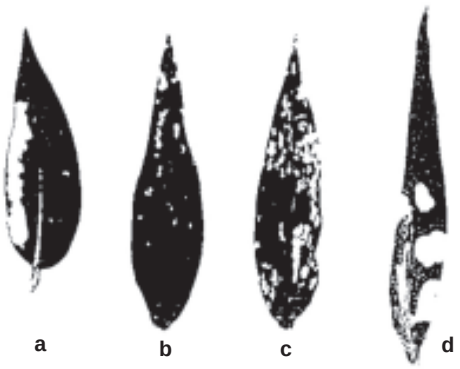

***Figure 5. Feeding pattern of* Lema semifulva**
a - Adult; b - First larva; c - Second larva; d - Last larva

(b) Association with other Criocerinae: It is associated with *Lema coromandeliana* Fabr., *L. maheensis* Jac., *L. praeusta* Fabr., *L. terminata* Lacord. and *L. rufotestacea* Clark.
(c) Ecological niche: It feeds on the marginal area of a leaf leaving thread like filaments, whereas *Lema coromandeliana*, *L. maheensis, L. praeusta, L. terminata* and *L. rufotestacea* make holes in the middle part of the leaf. (For figures of feeding pattern see Kalaichelvan *et al*., 2003.)

Discussion

That in Criocerinae larval instars carry a faecal load or shield, and that pupation occurs within a cocoon, have also been described and recorded by Sengupta and Behura (1957), Srivastava and Bhagat (1966), and Visalakshi and Nair (1978). Pupation within a cocoon has been mentioned by Cox (1996, 1998). White (1993) has pointed out cocoon formation in North American species of *Lema*. Visalakshi and Nair (1978) have recorded formation of cocoon by hardening of a frothy white material exuding from the mouth of the last instar larva, as observed in the present project too. That in captivity pupation occurs between leaves of the host plant has been observed by Sengupta and Behura (1957) in *Lema praeusta*, an observation repeated in the present study in another species of *Lema*. In the present study it has been noted that the adult, after eclosion from the pupal skin, remains within the cocoon for some time, so that the adult leaving the cocoon, is fully pigmented. This situation has been recorded also for North American species of *Lema* by White (1993).

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NEW RECORD **ZOOS' PRINT JOURNAL 20(6): 1898-1899**

Asteridiella pygei Hansf. var. *microspora* Hosag., a new record from southern India

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During a survey of the foliicolous fungi in the Silent Valley National Park, Palakkad district of Kerala State, we collected a specimen of *Pygeum wightianum* Blume (Rosaceae) with infection. Microscopic examination of the material revealed that it is a hitherto unrecorded member of the family Meliolaceae from southern India and hence the note.

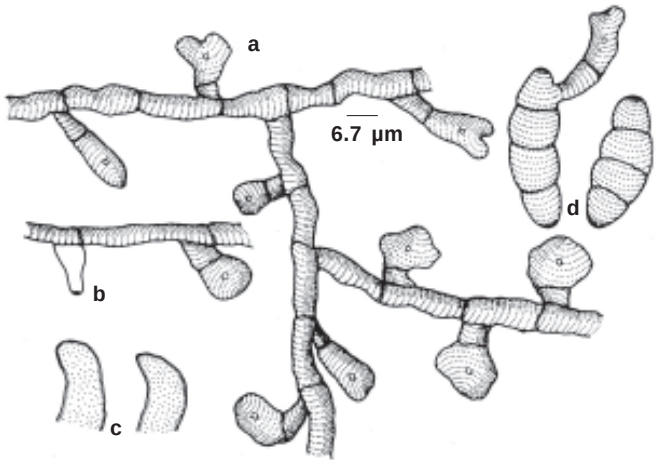

***Figure 1. Asteridiella pygei* Hansf. var. *microspora* Hosag.**
a - Appressorium; b - Philalida;
c - Perithecial wall cells; d - Ascospores

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Asteridiella pygei Hansf. var. *microspora* Hosag., Meliolales of India, p. 100, 1996 (Fig. 1)

Material examined: 13.xii.2003, Sairandhri, Silent Valley, Palakkad, Kerala, on leaves of *Pygeum wightianum* Blume (Rosaceae), coll. V.B. Hosagoudar, HCIO, TBGT

Colonies few, hypophyllous, dense, thinly velvety, up to 3mm in diameter. Hyphae straight, substraight, flexuous to crooked, branching alternate, opposite to irregular at acute to wide angles, loosely to rarely closely reticulate, cells 24-32 x 5-7µm. Appressoria alternate, straight to curved, antrorse, subantrorse to often recurved, 16-28µm long; stalk cells cylindrical to cuneate, 3-11µm long; head cells ovate, globose, oblong, clavate, straight to curved, entire, angular to sublobate to lobate, 12-16 x 9-11µm. Phialides mixed with appressoria, scattered, conoid to ampulliform, 14-21 x 6-8µm.

Perithecia scattered, globose, up to 160µm in diameter; perithecial wall cells numerous, conoid, larviform, curved, broadly rounded to attenuated at the apex, up to 20µm long; ascospores ellipsoidal, mostly curved, rarely straight, 3-septate, constricted at the septa, 35-39 x 14-16µm.

This taxon was described on *Rubus* sp. collected from Sikkim by J.N. Kapoor (Hosagoudar, 1996) and is known here from the southern Western Ghats on *Pygeum wightianum* Blume. Hence, it is evidenced that this fungus has a host range and also occurs both in the Himalayan region and in the Western Ghats, as in the case of *Schiffnerula camelliae* (Sydow, Sydow & Butler) Hughes (Hosagoudar *et al*., 1999).

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BODY CONDITION EVALUATION AND ITS RELATIONSHIP TO PARASITISM IN CAPTIVE DEER (*AXIS AXIS*)

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Health condition of large animals can be assessed by observing their body condition. A criteria suggested by Riney (1960) for evaluating body condition of some ungulates was adopted for monitoring the appearance of captive Spotted Deer. Body condition evaluation (BCE) involves judging the physical condition of the animals based on the visual examination of the degree of protuberance of bony processes on the body surface.

BCE is generally expressed in the form of indices referred to as body condition index (BCI). The method is made more quantitative by giving scores for different body parts to obtain a value. The index is employed to compare the mean body condition of two populations of a species, amongst different individuals of any particular age and sex of a population, and between populations.

Endoparasites play an important role in the health status of the wild animals. The effects of parasites on domestic animals are well studied. It is largely assumed that the same holds true for free ranging wild animals, although the etiology of parasites in the wild is likely to be much different. The effect of parasitism on the overall health of a population was assessed in the present investigation by evaluating the body condition of Spotted Deer (*Axis axis*) in captivity and in free ranges as well.

Seventeen captive Spotted Deers were selected for evaluating the health status of which seven were found to have parasitic infestation and 10 were non-infected. Body condition evaluation revealed that 4/7 (57.14%) were in good condition and 3/7 (42.86%) were rated as fair in body condition. The observational studies on the effect of diseases on affected individuals are possible only in some instances. Observational studies regarding body condition score of non-infected Spotted Deer revealed 8/10 (80%) as good and 2/10 (20%) as fair.

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Table 1. Health status of infected and non infected Spotted Deer in captivity.

Rearing type	Health status							
	Good		Fair		Poor		Total	
	#	%	#	%	#	%	#	%
Infected	4	57.14	3	42.86	-	-	7	41.18
Non infected	8	80	2	20	-	-	10	58.82
Total	12	70.59	5	29.41	-	-	17	100

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