LAND MOLLUSCS OF PILLARKAN SACRED GROVE

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Molluscs being epigeic remain undiscovered or under described, partly because of insufficient exploration and partly because of their often minute sizes (Madhyastha *et al.,* 2004). From India 1488 species belonging to 26 families and 140 genera have been recorded (Ramakrishna & Mitra, 2002; Madhyastha *et al.,* 2004).

Pillarkan sacred groove ($74^0$51'E & $13^0$12'N) is a reserve forest, less disturbed compared to the degraded inland plateau of the coastal belt of undivided South Canara with an average altitude of 50m. The 124.32ha area of Pillarkan is more or less plain with an undulating configuration and the forest is of semievergreen type (Bhat, 1993). We surveyed the land snails of Pillarkan in the month of November 2005 and the sampling techniques followed are those given by Mavinkurve *et al.* (2005).

A total of 109 specimens were collected, belonging to five families, 11 genera (Table 1). Ten taxa were identified up to the species level and five up to the generic level. Of the total species collected, six were microgastropods (<5mm) and the rest macrogastropods. Out of 10 species identified, seven are endemic to the Western Ghats and peninsular India. The Family *Ariophantidae* is represented by four genera and five species, whereas family *Diplommatinidae* is represented with only one species (Fig. 1), but numerically very abundant (*Nicida liricincta* alone constituted 38% of the total collection). *Alycaeus expatriatus* was represented with only one specimen in our collection from this region. Out of three slugs represented in Karnataka, *Mariaella dussumieri* is found in the study area.

Except for the amphibious land snails *Succinea baconi* and *Succinea subgranosa* all other species show faunal affinities with Western Ghat region of Karnataka. *Theobaldius ravidus*, *Nicida liricincta* are new report to South Canara. *Euplecta cacuminifera* and the genus *Microcystina* are new additions to the checklist of Karnataka (Mavinkurve *et al.*, 2004). Though Pillarkan constitutes 0.0065% area of Karnataka it represents a significant amount of land snail fauna (Fig. 2). The presence of rich molluscan diversity reflects the health of the ecosystem. Molluscs need good amount of leaf litter, canopy cover, floristic diversity and specialized microhabitats. Pillarkan with its varied microhabitats and being protected is of great significance for molluscs.

Table 1. Molluscs of Pillarkan Sacrd Grove, Karnataka.

Family	Species	Abundance	Endemism
Ariophantidae	*Euplecta indica*	14	NE
	Euplecta cacuminifera	7	E
	Mariaella dussumieri	4	E
	Macrochlamys sp *	2	-
	Microcystina sp *	8	-
Cyclophoridae	*Alycaeus expatriatus* *	1	E
	Theobaldius ravidus	5	E
	Theobaldius shiplayi	4	E
	Cyathopoma atrosetosum *	11	E
Diplommatinae	*Nicida liricincta* *	42	E
Succineidae	*Succinea baconi*	2	NE
	Succinea subgranosa *	3	NE
Subulinidae	*Glessula sp 1*	2	
	Glessula sp 2	2	
	Prosopeas sp	1	

* - Micro gastropods (<5mm); E - Endemic, NE - Non-Endemic

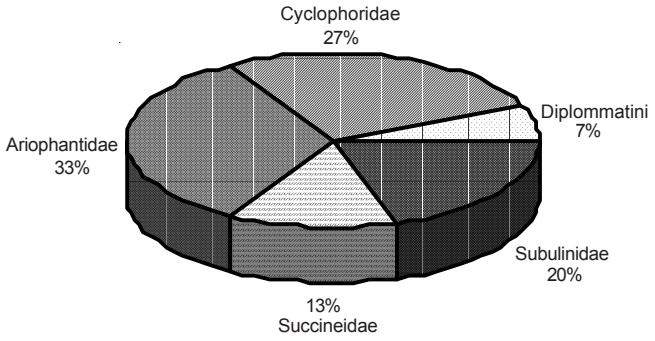

Figure 1. Species richness in each family of Land snails found in Pillarkan

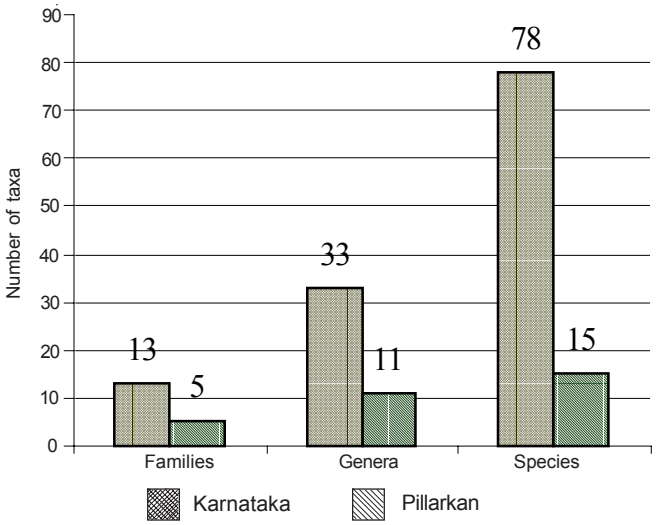

Figure 2. Comparison between the land snails of Karnataka and Pillarkan

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ACKNOWLEDGEMENTS

The authors are grateful to MoEF for the Grants under the AICOPTAX scheme. We thank the Principal, Poornaprajna College, Udupi for extending institutional facilities and Mr. Ananth Padbhanabha for his help during the fieldwork.

Manuscript 1485b; Received 26 December 2005; Finally accepted 18 April 2006; Date of publication 21 May 2006