

Note brève

EXPERIMENTS WITH THE MALE OF *PRIONCHULUS PUNCTATUS* (COBB, 1917)
ANDRÁSSY, 1958

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Males of *Prionchulus punctatus* are rare and have only been found occasionally e.g. Arpin (1979) found three males and Samsøen, Arpin, Khan and Coomans (1984) found an unusually high proportion of females in a particular population (almost ten times more than that in other samples) together with only one male of *P. punctatus*.

The behaviour of the male was observed by placing it in cultures of female *P. punctatus* from different localities for one week, the cultures for this purpose being started with ten females a few days before the addition of the male : there was plenty of prey available. Female *P. punctatus* always attack prey but the male, although moving, quite actively, never attacked any prey. In the vicinity of females, the male slowed down and moved around the female, curling its posterior end in an attempt to catch the body of a female. Some bending of the posterior end of the female was also observed and copulation was seen several times, although no sperm was found in the females. Male gonads on the other hand are well developed, so sperm production probably occurs. Eggs produced by those females do not differ in structure or size from those in other cultures.

The females also reacted to the presence of the male. Before the male was put in, females were scattered all over the culture moving more or less continuously, but a few hours after the introduction of the male most of the females were in close proximity to the male, the best aggregation being obtained when the females originated from the same sample as the male.

When the male was placed in an old culture, its movements were quite agitated and shortly after its introduction it was attacked by some females, even when enough prey were still available. A similar attack on the prey organisms by *P. punctatus* females was observed when new prey was added to old unstarved cultures. It is possible that the male was not recognized as belonging to the same species and considered as prey. In starved cultures of *P. punctatus*, females never attacked juvenile stages of their own progeny, as do *P. muscorum* females.

No experiment could be carried out with cultures of *P. muscorum* because the single male found died of fungal infection within five weeks.

The concentration of females in the field as well as in experimental conditions indicate that males may attract females but no sperms were found in females and sexual reproduction in this parthenogenetic species has not been proved.

REFERENCES

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