©Naturwiss. med. Ver. Innsbruck, download unter www.biologiezentrum.at

Ber. nat.-med. Verein Innsbruck	Suppl. 10	S. 141	Innsbruck, April 1992

8th International Congress of Myriapodology, Innsbruck, Austria, July 15 - 20, 1990

Mapping the Ocular Field in *Proteroiulus fuscus* (AM STEIN)

(Diplopoda, Blaniulidae)

by

Maija PEITSALMI and V. Ilmari PAJUNEN

Leveemäki 19, SF-13430 Hämeenlinna, Finland

Div. of Ecology, Dept. of Zoology, University of Helsinki, P. Rautatiekatu 13, SF-00100 Helsinki, Finland

Newly moulted individuals of *Proteroiulus fuscus* were collected by trapping from conifer tree stumps and their stadia were determined on the basis of the defence glands method. The number of ocelli and their relative positions were determined In 20 % of the 1180 individuals studied the numbers of ocelli differed between the left and the right eye, the maximal asymmetry being three ocelli. The first stadium is eyeless. One new ocellus is formed during each of the 2nd and the 3rd moults. In later moults the number of new ocelli is 0, 1 or 2, the corresponding probabilities being 0.0167, 0,98 and 0,0033. The distribution of ocelli size classes was in preadults consistent with corresponding trinomial distribution, but in mature individuals the frequency of dominant size class was lower than expected.

The form of the eyes varies widely. The ocular field appears to contain three anterio-posterior rows of possible locations. In 76 % of cases the growth starts in the middle row, in 21 % in the ventral and in 3 % in the dorsal row. New ocelli are added at the anterior border of the eye, usually in positions adjacent to already occupied locations. The first ocelli usually form a single row, then new ocelli are added also laterally. The initial row strongly influences the direction and form of later lateral additions of ocelli. Sucessive preadult stadia can be identified on the basis of ocelli number, but in later moults the accuracy gradually decreases. (Published in: Ann. zool. Fenn. **28:** 31 - 39 (1991)).

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Berichte des naturwissenschaftlichen-medizinischen Verein Innsbruck

Jahr/Year: 1992

Band/Volume: S10

Autor(en)/Author(s): Peitsalmi Maija, Pajunen Ilmari V.

Artikel/Article: Mapping the Ocular Field in Proteroiulus fuscus (Am Stein) (Diplopoda, Blaniulidae). 141