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DORYLAIMIDA, DIPHTEROPHORIDA AND TYLENCHIDA - A FIRST REPORT

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Zusammenfassung: Dorylaimida, Diphterophorida und Tylenchida.- Eine vorläufige Artenliste, basierend auf 2174 Proben, wird angegeben. 37 Arten konnten bis *dato* bestimmt werden, wobei in der Mehrzahl der Bettsedimentproben (82%) nur jeweils 1 Art vorgefunden wurde.

Between April 1977 and September 1984 different kinds of sampling methods have been tested: various traps operating either on the sediment surface (BRETSCHKO 1978a) or in the bedsediments (BRETSCHKO & KLEMENS 1986). The sedimentbiocoenosis was also sampled with pumping methods (BRETSCHKO 1978b) and the quantitative freeze core method (BRETSCHKO & KLEMENS cit.). Additional samples have been taken with Surber samplers and with a (normal) drift net. All samples are fixed with Formalin in the field and sieved (100 μm) and sorted under a stereo microscope in the laboratory. As a total, 2174 samples have been taken, of which 42 % contained Nematodes and from this 11 % belonged to the three studied orders. Because the real aim of sampling was method testing, the samples are over distributed in time and not comparable due to the usage of different methods. This has to be considered in all ecological statements.

Order Dorylaimida, Suborder Dorylaimina:

Superfamily Nygolaimoidea:		Sediment depth*	Sample size+
- *Paravulvus hartingii* (de Man, 1880):			
July, September	1977	0	(2)
May	1979, 1982	10	(2)
- *Nygolaimus ? asymmetricus* Andrassy, 1962:			
November	1982	20	(1)

* Sediment depth in cm (0 = sediment surface).

\+ Number of positive samples in respective depth-layers.

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Superfamily Dorylaimodea: Sediment depth Sample size

Family Dorylaimidae sensu lato:

- Genus *Dorylaimus* Dujardin, 1845:

The systematics of this genus is in a very confused state

- *D. stagnalis* Dujardin, 1845 (preliminary ident.):

July, November	1981	0	(1)
May	1982	20	(5)
August	1984	40	(3)

- Forma *D. stagnalis* (Vulva farther caudad):

July, November	1977	0	(3)
January	1980	10	(2)
July, August	1982	20	(6)
September	1984	30	(4)
		40	(5)
		50	(2)

Not identifiable males:

June	1980	0	(1)
July	1982	20	(1)
September	1984	40	(1)
		50	(1)

Not identifiable juveniles:

June	1977	0	(1)
February	1980	20	(3)
November	1981	40	(1)
July	1982	100	(1)

- *Prodorylaimus longicaudatoides* Altherr, 1968:

April	1977	0	(1)
April	1980	20	(1)
May, July, August	1982	40	(1)
		50	(3)

- *Prodorylaimus acris* (Thorne, 1939):

May	1979	20	(1)

- *Prodorylaimus mas* Loof, 1985:

May	1982	20	(2)

- *Prodorylaimus uliginosus* Loof, 1985:

May	1982	60	(1)

Genus *Eudorylaimus*:

Quite a few species belong to this most difficult genus. One species belongs clearly to the *carteri*-group, but has a longitudinal vulva, by which it differs from the true *E. carteri*. A longitudinal vulva is typical for *E. consobrinus* (de Man, 1917) and for *E. jurassicus* (Altherr, 1953), but the first one has a much shorter pharynx and a much slenderer tail, the second one a nearly straight tail.

		Sediment depth	Sample size
June, July, November	1977	0	(6)
November	1979	10	(1)
April	1980	20	(7)
April, November	1981	40	(1)
May, July	1982	50	(2)
September	1984		
- *E. agilis* (de Man, 1880):			
November	1982	100	(1)
Carteri-group, not identifiable:			
Females (vulva transverse):			
April	1977	0	(3)
December	1979	20	(3)
April	1980	50	(1)
February, May	1982	80	(1)
Juveniles:			
April, June	1980	0	(2)
May, August	1982	20	(2)
		50	(1)
Male (number and positions of supplements are not determinable):			
May	1982	20	(1)
- *Mesodorylaimus aberrans* Loof, 1969:			
November	1977	0	(1)
August, December	1979	20	(2)
- *Mesodorylaimus sp.*:			
Male: August	1982	80	(1)
Female (longtailed, vulva anterior, 37 %):			
February	1982	20	(1)
- *Chrysonemoides holsaticus* (W. Schneider, 1925):			
May	1979	20	(2)
- *Enchodelus macrodorus* (de Man, 1880):			
October	1977	0	(1)
May	1982	40	(1)
- *E. vulvostriatus* (Stefanski, 1924):			
May	1979	20	(1)
- *E. sp. (macrodoroides*-Gruppe):			
April	1977	0	(1)
May	1982	40	(1)
- *Pungentus engadinensis* (Altherr, 1950):			
May	1979	20	(1)

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Family Aporcelaimidae:		Sediment depth	Sample size	Remarks
- *Aporcelaimellus obtusicaudatus* (Bastian, 1865):				
April, May, June, July	1977	0	(9)	
May	1979	20	(9)	
April, May, June	1980	40	(7)	
April, November	1981	50	(2)	
May, July, August	1982	60	(3)	
		80	(2)	
		100	(1)	
- *Aporcelaimellus simplex* (Thorne & Swanger, 1936):				
February, May	1980	20	(1)	
		40	(1)	
- *Aporcelaimellus* (?) *sp.*:				
June	1979	20	(1)	Female
July	1981	20	(1)	Juvenile
- *Sectonema macrospiculum* (Altherr, 1958):				
May	1982	80	(1)	
- *Aporcelaimus ronnebergi* Altherr, 1968:				
November	1977	0	(2)	
September	1984	40	(1)	
		50	(1)	
Family Longidoridae:				
- *Longidorus caespiticola* Hooper, 1961:				
August	1984	0	(1)	
- *Longidorus picenus* Roca, Lamberti & Agostinelli, 1985:				
September	1979	20	(1)	
- *Longidorus sp.*:				
May	1982	50	(2)	Juveniles
Family Belondiridae:				
- *Axonchium coronatum* (de Man, 1906):				
August	1982	40	(1)	
Family Leptonchidae:				
- *Dorylaimoides limnophilus* (de Man, 1880):				
May	1982	20	(1)	
Tylencholaimus proximus Thorne, 1939:				
February	1982	20	(1)	

Order Dorylaimida, Suborder Mononchina:		Sediment depth	Sample size	Remarks
- *Anatonchus tridentatus* (de Man, 1876):				
October	1977	20	(2)	
April	1980	50	(1)	
May, August	1982	100	(1)	
- *Mononchus truncatus* Bastian, 1865:				
June, July	1977	0	(3)	
January	1980	20	(5)	
May	1982	50	(1)	
August	1984			
- *Mononchus aquaticus* Coetzee, 1968:				
December	1979	20	(14)	
April, May, July, November	1981	40	(1)	
February, May, July, August	1982	50	(1)	
		60	(3)	
		70	(1)	
		80	(3)	
		90	(1)	
- *Clarkus papillatus* (Bastian, 1865):				
February	1982	40	(1)	
- *Prionchulus muscorum* (Dujardin, 1845):				
July, October	1977	0	(3)	
July	1980	30	(1)	
November	1981	40	(2)	
February	1982	60	(1)	
		90	(1)	
- *Prionchulus punctatus* Cobb, 1917:				
April, June, July, October	1977	0	(4)	
September	1979	20	(2)	
June	1980	40	(1)	
May	1981	50	(1)	
May, July	1982	60	(1)	
		90	(1)	
- *Iotonchus zschokkei* (Menzel, 1913):				
April	1977	0	(1)	
- *Mylonchulus cavensis* (W. Schneider, 1940) sensu Andrassy, 1959:				
May	1979	20	(1)	Female, posterior genital branch is missing
November	1981	80	(1)	
- *Mylonchulus sp.*:				
July	1977	0	(1)	Male, not identifiable
Order Diphtherophorida:				
- *Diphtherophora communis* de Man, 1880:				
May	1979	20	(1)	

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Order Tylenchida, Suborder Tylenchina:

Superfamily Criconematoidea:		Sediment depth	Sample size	Remarks
Family Hemicycliophoridae:				
- *Hemicycliophora aquatica* (Micoletzky, 1913):				
May, November	1979	0	(1)	
May	1982	20	(2)	
August	1984	50	(1)	
Family Criconematidae:				
- *Criconema sphagni* Micoletzky, 1925:				
September	1979	20	(1)	
Superfamily Tylenchoidea:				
Family Hoplolaimidae:				
The species-identification of the genus Rotylenchus is in the process of expert evaluation.				
- *Heliocotylenchus sp.*:				
May	1979	20	(1)	Juvenile
Family Neotylenchidae:				
- *Hexatylus sp.*:				
Looks like H. viviparus Goodey, 1926, but has a much longer tail (c' = 6.5), which is bent ventrad at the end.				
January	1980	20	(1)	
Family Anquinidae:				
- *Subanguina sp.*:				
June	1980	60	(1)	Female
- *Ditylenchus sp.*:				
May	1979	20	(2)	
February	1982	0	(1)	Female
August	1984			
Family Heteroderidae:				
- *Meloidogyne sp.*:				
September	1979	20	(1)	Male, possibly *M. hapla* Chitwood, 1949?

A total of 37 species are identified. Despite of this high species number in relation to a sampling area of only 1600 m², 82 % of positive samples contained only one species; 13 and 3 % contained two and three species, respectively. Three samples contained four, six and seven species. All samples with more than two species are collected with stand pipe traps (BRETSCHKO & KLEMENS 1986) in bedsediment depths around 20 cm.

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