

COMMUNICATIONS

1. Notre secrétaire, M. C. VERSTRAETEN, lit la communication suivante, au nom de notre collègue, M. Robert BOSMANS, et de M. P. COTTENIS, empêchés :

Araignées rares ou nouvelles pour la faune belge des cultures.

Un certain nombre de pièges placés dans diverses cultures à Kieldrecht (O. Vl.) et à Warneton (Ht) ont permis notamment la capture d'araignées très intéressantes sur le plan faunistique.

Par moins de quatre nouvelles espèces viennent s'ajouter à la faune belge, tandis qu'une cinquième est citée pour la deuxième fois. Elles appartiennent toutes à la famille des Linyphiidae :

— *Jacksonella falconeri* (JACKSON) Belg. n. sp. : Warneton, champ de froment d'hiver, 1 ♀ le 12.VI.1974 ; champ d'escourgeon, 3 ♂ le 29.VI.1976.

— *Troxochrus cirrifrons* (CAMBRIDGE) Belg. n. sp. : Warneton, champ de froment d'hiver, 1 ♂ le 24.II.1977 ; Kieldrecht, champ de froment d'hiver, 1 ♂ le 30.IV.1976.

— *Milleriana inerrans* (CAMBRIDGE) Belg. n. sp. : Kieldrecht, champ de froment d'hiver, 1 ♂ le 21.VII.1974 ; champ de betteraves, 1 ♂ le 30.IV.1976 ; champ de lin, 1 ♂ le 30.IV.1976.

— *Syedra gracilis* (MENGE) Belg. n. sp. : Kieldrecht, champ de froment d'hiver, 1 ♀ le 24.VI.1974.

— *Centromerus capucinus* (SIMON) : Warneton, champ de froment d'hiver, 1 ♂ le 25.I.1977.

Presque toutes ces espèces sont considérées comme rares dans les pays limitrophes ou n'y ont jamais été capturées. Leur habitat est d'ailleurs le plus souvent inconnu. Ceci montre que certaines espèces considérées comme rares, seraient plutôt des habitants des grandes cultures. Ces biotopes ont été généralement, jusqu'à présent, négligés au point de vue faunistique.

2. M. R. DELEDICQUE signale la rare capture de *Malachius aeneus* L. (Col. Melyridae) à Keerbergen (Brabant) le 28.V.1977.

CONTRIBUTION TO THE KNOWLEDGE
OF THE ARACHNO- AND ENTOMOFAUNA
OF DIFFERENT WOODHABITATS*

PART II. INFLUENCE OF THE MICRORELIEF
UPON EPEDAFIC COLEOPTERA

by L.L.A. BAERT** and J.P. MAELFAIT***

Abstract

The purpose of this survey is to find out if a difference in microrelief can have some influence upon the faunal composition and the catch-frequencies of epedafic Coleoptera. Therefore a woodplot consisting of alternated ridges and drains was investigated a whole year round (from 30 April 1972 until 26 April 1973).

I. Introduction

Only in exceptional cases a macrohabitat can be called homogeneous. Therefore it can be divided into a number of microhabitats, differing from each other in microclimatological circumstances (e.g. temperature and relative humidity) and structural features of the soil (e.g. type of litter and microrelief).

Microhabitats can thus be defined as parts of a general habitat (macrohabitat) which differ clearly from each other by distinct environmental factors. Our research aims to investigate what influence the difference in microhabitats (especially microrelief) can have on the composition of the fauna and the catchfrequencies of the epedafic Coleoptera. This study can be conceived as

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preliminary because of the limitations of the used method as seen in the previous paper (MAELFAIT & BAERT, 1975). Therefore we speak of the diversity and faunal composition of the pitfall captures and not those of the microhabitats.

II. Sampled microhabitats

A general description of the investigated macrohabitat « De Breedgrashouw » at Gontrode and the detailed description of the respective positions of the pitfalls within the microhabitats have already extensively been dealt with in an earlier paper (MAELFAIT & BAERT, 1975).

Since the studied woodplot consists of alternating series of ridges (mean width of the studied ridge: ± 5 m) and drains (mean width: ± 2 m), we can arbitrarily distinguish two microhabitats: (1) the ridge and (2) the drain. They differ from each other in:

a) The higher degree of humidity in the drain, resulting from the thick layer of litter and the partly submerging of the drain in winter and autumn.

b) The thick layer of litter (± 40 cm) in the drain, blown by the wind from the ridge. On the ridge there is no (on some places only a very thin) litter layer.

c) The difference in microrelief (the upper level of the litter layer within the drain lays ± 32 cm lower than the upper level on the ridge).

Both the used sample technic and a detailed description of the pro and contra of this method were also already published in a former paper (MAELFAIT & BAERT, 1975).

III. Results and discussion

Comparison of faunal composition and catchfrequencies between the pitfalls of the ridge and drain

a) Results

With the used pitfallmethod a total of 4,878 Coleoptera was caught. 2,850 on the ridge and 2,028 in the drain, distributed

TABLE I

List of species caught with pitfalls (6 upon the ridge and 6 within the drain)

	Numbers ridge drain		Numbers ridge drain	
CARABIDAE				
<i>Abax ater</i> VILLERS	13	31	<i>Mycetoporus brunneus</i> (MARSH.)	53 6
<i>Agonum assimile</i> PAYK.	1	0	<i>Mycetoporus punctus</i> (GYLL.)	1 0
<i>Agonum mülleri</i> HBST.	1	3	<i>Mycetoporus splendidus</i> (GRAV.)	1 0
<i>Amara familiaris</i> DUFT.	1	0	<i>Ocypus ater</i> (GRAV.)	3 2
<i>Agonum plebeja</i> GYLL.	1	1	<i>Ocypus compressus</i> MARSH.	1 2
<i>Agonum similata</i> GYLL.	0	1	<i>Olophrum piceum</i> (GYLL.)	2 11
<i>Anisodactylus binotatus</i> F.	2	0	<i>Othius myrmecophilus</i> KIESW.	86 5
<i>Asaphidion flavipes</i> L.	1	1	<i>Othius punctulatus</i> (GOEZE)	2 1
<i>Argutor strenuus</i> PANZ.	0	1	<i>Oxypoda alternans</i> (GRAV.)	2 0
<i>Badister bipustulatus</i> F.	2	0	<i>Oxypoda exoleta</i> ER.	5 0
<i>Bradycellus verbasci</i> DUFT.	0	1	<i>Oxypoda lividipennis</i> MANNH.	101 44
<i>Carabus purpurascens</i> L.	1	2	<i>Oxypoda spectabilis</i> MÄRK.	1 3
<i>Lagurus vernalis</i> PANZ.	2	0	<i>Oxytelus complanatus</i> ER.	1 1
<i>Leistus rufomarginatus</i> DFT.	112	185	<i>Oxytelus rugosus</i> (GRAV.)	4 4
<i>Leistus ferrugineus</i> L.	0	1	<i>Oxytelus sculpturatus</i> GRAV.	8 6
<i>Leistus rufescens</i> F.	0	1	<i>Oxytelus tetracaratus</i> (BLOCK.)	0 6
<i>Loricera pilicornis</i> F.	7	11	<i>Platystethus cornutus</i> (GRAV.)	1 1
<i>Metallina lampros</i> HBST.	13	24	<i>Platystethus arenarius</i> (FOURC.)	0 1
<i>Nebria brevicollis</i> F.	1	17	<i>Philonthus fuscipennis</i> (MANNH.)	6 5
<i>Notiophylus biguttatus</i> F.	167	40	<i>Philonthus varius</i> (GYLLH.)	1 0
<i>Notiophylus rufipes</i> CURT.	78	26	<i>Philonthus splendens</i> (F.)	1 0
<i>Peryphus tibialis</i> DFT.	0	1	<i>Philonthus intermedius</i> (BOISD. LAC.)	0 1
<i>Phyla obtusum</i> SERV.	0	1	<i>Philonthus rotundicollis</i> (MÉNÉTR.)	0 1
<i>Platysma vulgare</i> L.	0	1	<i>Phloeobaris subtilissima</i> MANNH.	9 5
<i>Philochtus guttula</i> F.	1	0	<i>Proteinus brachypterus</i> F.	12 15
<i>Stenolophus teutonius</i> SCHRANCK	1	2	<i>Quedius fuliginosus</i> (GRAV.)	0 9
<i>Steropus madidus</i> F.	1	6	<i>Quedius fumatus</i> STEPH.	0 6
<i>Trechus quadristriatus</i> SCHRANCK	1	0	<i>Quedius lateralis</i> (GRAV.)	0 3
			<i>Quedius longicornis</i> KR.	0 2
STAPHYLINIDAE				
<i>Acidota cruentata</i> MANNH.	51	40	<i>Quedius picipes</i> (MANNH.)	8 2
<i>Atheta</i> sp. (<i>aterrima</i> GRAV.?)	1	0	<i>Quedius tristis</i> (GRAV.)	1 0
<i>Atheta</i> sp. (<i>debilis</i> ER.?)	65	95	<i>Stenus biguttatus</i> (L.)	1 0
<i>Atheta</i> sp. (<i>fungi</i> GRAV.?)	1	0	<i>Stenus bimaculatus</i> GYLL.	1 2
<i>Atheta</i> sp. (<i>pygmaea</i> (GRAV.)?)	1	2	<i>Stenus clavicornis</i> (SCOP.)	1 1
<i>Atheta</i> sp. (<i>gagatina</i> BAUDI?)	9	2	<i>Stenus fuscicornis</i> ER.	1 0
<i>Atheta</i> sp. (<i>longicornis</i> (GRAV.)?)	0	1	<i>Stenus morio</i> GRAV.	0 1
<i>Autalia impressa</i> (OLIV.)	16	10	<i>Stillicus subtilis</i> ER.	0 1
<i>Bolitobius trinotatus</i> ER.	1	0	<i>Syntomium aeneum</i> (MÜLL.)	156 68
<i>Chilopora longitarsus</i> (ER.)	0	1	<i>Tachinus subterraneus</i> (L.)	1 4
<i>Conosoma testaceum</i> (F.)	6	7	<i>Tachinus rufipes</i> (DEG.)	0 1
<i>Cratarea suturalis</i> (MANNH.)	21	16	<i>Tachyporus chrysolinus</i> (L.)	16 6
<i>Falagria thoracica</i> CURT.	4	3	<i>Tachyporus hypnorum</i> (L.)	5 2
<i>Geostiba circellaris</i> (GRAV.)	8	1	<i>Xantholinus linearis</i> (OLIV.)	21 5
<i>Habrocerus capillaricornis</i> (GRAV.)	10	2	DYTISCIDAE	
<i>Latrimaeum atrocephalum</i> (GYLL.)	156	203	<i>Agabus bipustulatus</i> (L.)	1 1
<i>Lathrobium pallidum</i> NORDM.	14	3	<i>Agabus guttatus</i> (PAYK.)	0 1
<i>Lesteva sicula</i> ER.	0	2	<i>Agabus striolatus</i> (GYLL.)	1 0
<i>Lesteva longelytrata</i> (GOEZE)	0	1	<i>Agabus sturmi</i> (GYLL.)	1 0
<i>Micropeplus tesserula</i> CURT.	25	23	<i>Hydroporus erythrocephalus</i> (L.)	72 24
<i>Micropeplus porcatius</i> (F.)	2	2	<i>Hydroporus obscurus</i> STURM.	6 2
<i>Mycetoporus angularis</i> MULS. REY	2	1	<i>Hydroporus planus</i> (F.)	3 2

	Numbers caught ridge drain			Numbers caught ridge drain	
PSELAPHIDAE					
<i>Brachygluta fossulata</i> (REICHR.)	139	89	<i>Rhinoncus bruchoides</i> HBST.	0	1
<i>Bythinus curtisi</i> DENN.	2	1	<i>Rhynchites cavifrons</i> GYLL.	1	0
<i>Bythinus validus</i> ACHÉ	0	3	<i>Stenocarus fuliginosus</i> MARSH.	1	1
<i>Pselaphus heisei</i> HBST.	1	1	<i>Strophosomus melanogrammus</i> FORST.	7	3
			<i>Tropiphorus carinatus</i> MÜLL.	0	1
SCYDMAENIDAE					
<i>Cephennum thoracicum</i> MÜLL. & KUNZE	31	10	EUCNEMIDAE		
<i>Neuraphes elongatulus</i> (MÜLL. & KUNZE)	244	183	<i>Trixagus dermestoides</i> L.	36	14
CATOPIDAE					
<i>Catops coracinus</i> KELLN.	7	34	LIODIDAE		
<i>Catops morio</i> (F.)	3	2	<i>Agathidium atrum</i> (PAYK.)	0	1
<i>Catops nigricans</i> (SPENCE)	6	12	<i>Agathidium seminulum</i> (L.)	4	5
<i>Catops tristis</i> (PANZ.)	11	17	<i>Amphicyllis globus</i> (F.)	5	20
<i>Choleva cisteloides</i> (FRÖL.)	0	4	<i>Anisotoma humeralis</i> (F.)	2	0
<i>Choleva sturmi</i> BRIS.	0	1	<i>Anisotoma orbicularis</i> (HBST.)	0	1
<i>Nargus velox</i> (SPENCE)	152	179	<i>Liodes dubia</i> (KUG.)	2	2
<i>Nargus wilkini</i> (SPENCE)	367	128	<i>Liodes calcarata</i> (ER.)	1	3
<i>Ptomopagus sericatus</i> (CHAUD.)	0	1	<i>Liodes triepkei</i> SCHM. (?)	0	4
<i>Sciodrepoides watsoni</i> (SPENCE)	26	17	LATHRIDIIDAE		
SILPHIDAE					
<i>Necrophorus vespilloides</i> HBST.	1	0	<i>Enicmus transversus</i> OLIV.	25	11
ELATERIDAE					
<i>Agriotes pallidulus</i> LLL.	21	20	<i>Corticaria crenulata</i> GYLL.	3	2
<i>Agriotes sputator</i> L.	1	0	<i>Corticaria gibbosa</i> (HBST.)	7	1
<i>Athous difformis</i> LAC.	1	0	<i>Lathridius nodifer</i> WESTW.	1	0
<i>Athous haemorrhoidalis</i> F.	4	0	HYDROPHILIDAE		
<i>Athous subfuscus</i> MÜLL.	19	6	<i>Anacaena globulus</i> (PAYK.)	1	15
CHRYSOMELIDAE					
<i>Chrysomela staphylea</i> L.	0	1	<i>Anacaena limbata</i> (F.)	0	1
<i>Lema cyanella</i> (L.)	0	1	<i>Cercyon melanocephalus</i> (L.)	0	1
<i>Longitarsus juncicola</i> FAUDR.	1	1	<i>Cryptopleurum minutum</i> (F.)	1	0
<i>Longitarsus melanocephalus</i> (DEG.)	1	0	<i>Hydrobius fuscipes</i> (L.)	8	3
<i>Longitarsus parvulus</i> (PAYK.)	13	13	<i>Megasternum boletophagum</i> (MARSH.)	30	33
CURCULIONIDAE					
<i>Apion flavipes</i> PAYK.	1	0	<i>Sphaeridium scarabaeoides</i> L.	0	1
<i>Apion virens</i> HBST.	2	0	HYDRAENIDAE		
<i>Banalobius salicivorus</i> PAYK.	3	1	<i>Helophorus aquaticus</i> (L.)	0	1
<i>Caenopsis waltoni</i> BOH.	1	0	<i>Helophorus guttulatus</i> ssp. <i>brevipalpis</i> (BED.)	4	3
<i>Coeliodes dryados</i> GMEL.	1	1	<i>Helophorus asperatus</i> REY	1	0
<i>Coeliodes erythrocephalus</i> GMEL.	0	2	<i>Helophorus flavipes</i> (F.)	15	5
<i>Coetorrbynchus erysimi</i> F.	1	1	<i>Ochthebius auriculatus</i> REY	0	1
<i>Coetorrbynchus melanostictus</i> MARSH.	2	0	<i>Ochthebius minimus</i> (F.)	0	1
<i>Epipotaenus caliginosus</i> F.	1	3	PHALACRIDAE		
<i>Liosoma deflexum</i> PANZ.	2	2	<i>Olibrus aeneus</i> (F.)	3	0
<i>Orchestes jagi</i> L.	2	1	<i>Stilbus testaceus</i> (PANZ.)	1	1
<i>Otiobrynechus ligneus</i> OL.	6	2	COCCINELLIDAE		
<i>Otiobrynechus</i> sp.	12	5	<i>Coccinella septempunctata</i> L.	0	1
<i>Polydrosus undatus</i> F.	1	0	<i>Propylaea quatuordecimpunctata</i> (L.)	1	0
			<i>Thea vigintiduopunctata</i> (L.)	0	3
PTILIDAE					
			<i>Acrotichus intermedia</i> (GILLM.)	54	17
			<i>Smicrus filicornis</i> (FAIRM. & LABOULB.)	1	0

	Numbers caught ridge drain			Numbers caught ridge drain	
CRYPTOPHAGIDAE					
<i>Atomaria</i> sp. (<i>apicalis</i> ER. ?)	5	5	BYRRHIDAE		
<i>Atomaria</i> sp. (<i>atricapilla</i> STEPH. ?)	6	6	<i>Cytilus sericeus</i> FORST.	1	1
<i>Atomaria</i> sp. (<i>fuscicollis</i> MANSII. ?)	5	10	<i>Simplocaria semistriata</i> F.	18	6
<i>Atomaria</i> sp. (<i>linearis</i> STEPH. ?)	4	3	ASPIDIHORIDAE		
<i>A omaria</i> sp. (<i>nigripennis</i> (PAYK.)?)	1	1	<i>Aspidiphorus orbiculatus</i> (GYLL.)	3	0
<i>Cryptophagus setulosus</i> (STRM.)	0	1	IPIDAE		
<i>Grobbeinia jimetarii</i> (HBST.)	0	1	<i>Anisandrus dispar</i> F.	68	31
<i>Ootypus globosus</i> (WALTJ.)	1	0	<i>Hylastes palliatus</i> GYLL.	1	0
CANTHARIDAE					
<i>Cantharis quadripunctata</i> MÜLL.	0	1	<i>Taphorhynchus bicolor</i> HBST.	17	14
<i>Malthodes brevicollis</i> PAYK.	4	2	<i>Xyloterus domesticus</i> L.	4	2
NITIDULIDAE					
<i>Carpophilus dimidiatus</i> (F.)	0	1	SCARABEIDAE		
<i>Eपुरaea deleta</i> STURM.	0	1	<i>Serica brunnea</i> (L.)	1	1
<i>Eपुरaea</i> sp. (<i>binotala</i> REITT. ?)	3	1	SCAPHIDIIDAE		
RHIZOPHAGIDAE					
<i>Rhizophagus bipustulatus</i> F.	1	1	<i>Scaphidium quadrimaculatum</i> OLIV.	2	0
<i>Rhizophagus perforatus</i> ER.	1	1	<i>Scaphosoma agaricinum</i> L.	1	0
<i>Rhizophagus ferrugineus</i> (PAYK.)	1	0	TENEBRIONIDAE		
ENDOMYCHIDAE					
<i>Sphaerosoma pilosum</i> (PANZ.)	4	7	<i>Cylindronotus laevioctostriatus</i> GOEZE	1	0
ANOBIIDAE					
<i>Stegobium panicea</i> (L.)	1	0	CLAMBIDAE		
			<i>Clambus armadillo</i> DEG.	0	2
			Total	2,850	2,082
				159	162
					species

over a total of 209 species (table I). From these 159 species were caught on the ridge and 162 species in the drain, while 113 were in common between both microhabitats. 46 species were only caught on the ridge, although all these are represented by maximum 5 individuals. On the other hand 49 species were caught only in the drain with maximum 9 individuals pro species.

The nomenclature of the Carabidae is grounded on the « Catalogue des Coléoptères de Belgique - DERENNE E., 1957 », while the nomenclature of the other families is grounded on « Die Käfer Mitteleuropas Bd. 3, 4, 5, 7, 8 and 9 - FREUDE H. ; HARDE K.W. and LOHSE G.A. ».

In a previous paper (MAELFAIT & BAERT, 1975) Catopidae and Silphidae were both listed as Silphidae, and Hydrophilidae and Hydraenidae as Hydrophilidae.

b) *Predominant activity of most caught species in one of the 2 microhabitats.*

A simple t-test was carried out (table II) to control if some species were, or not, significantly predominantly active in one of the two microhabitats. As significance level we took $P \leq 0.05$. Only the period of activity of the species concerned (first column of table II) was taken into account for this test. Within this period n indicates the number of 14 days catchfrequencies.

TABLE II
Performed t-test

Species	Period of activity	t	n	P	Interpretation
<i>Leistus rufomarginatus</i>	12/V/72-01/11/73	0.8286	20	0.5 > P > 0.4	not sign. for drain
<i>Notiophilus rufipes</i>	12/V/72-26/IV/73	3.1269	26	0.005 > P > 0.001	very sign. for ridge
<i>Notiophilus biguttatus</i>	12/V/72-26/IV/73	4.4571	26	0.001 > P	very sign. for ridge
<i>Mycetoporus brunneus</i>	12/V/72-29/IX/72	2.6729	11	0.025 > P > 0.01	sign. for ridge
<i>Othius myrmecophilus</i>	12/V/72-26/IV/73	3.3638	26	0.005 > P > 0.001	very sign. for ridge
<i>Latrimaeum atrocephalum</i>	12/V/72-26/IV/73	0.6661	26	P > 0.5	not sign. for drain
<i>Oxygoda lividipennis</i>	27/IX/72-26/IV/73	1.4641	14	0.2 > P > 0.1	not sign. for ridge
<i>Syntomium aenum</i>	12/V/72-26/IV/73	2.9879	26	0.005 > P > 0.001	very sign. for ridge
<i>Hydroporus erythrocephalus</i>	09/VI/72-15/IX/72	1.5567	8	0.4 > P > 0.2	not sign. for ridge
<i>Brachygluta fossulata</i>	12/V/72-26/IV/73	0.8916	26	0.4 > P > 0.2	not sign. for ridge
<i>Nargus wilkini</i>	12/V/72-26/IV/73	1.6038	26	0.2 > P > 0.1	not sign. for ridge
<i>Acrotichus intermedia</i>	12/V/72-13/IX/72	3.0885	12	0.01 > P > 0.005	sign. for ridge

Only six of the 113 common species were significantly predominantly active on the ridge : *Notiophilus biguttatus* and *rufipes*, *Mycetoporus brunneus*, *Othius myrmecophilus*, *Syntomium aenum* and *Acrotichus intermedia*, while not one species was significantly more active in the drain.

Greater facilities of moving for Coleoptera on the litterless ridge seems to be the most probable explanation for the higher catchfrequencies.

c) *Distribution of the species over catchfrequency - classes*

From table III it follows clearly that these habitats are characterised by a great number of species of which only some are caught abundantly.

d) *Catchdiversity*

The « species-richness » is almost equal for both habitats (ridge : 159 species ; drain : 162 species). The diversity of our

TABLE III
Distribution of the species over catchfrequency-classes

Catchfrequencies	ridge		drain	
	S	%	S	%
1- 5	104	66	114	70.5
6- 10	16	10	13	8
11- 15	8	5	9	5.7
16- 20	5	3	7	4.4
21- 25	5	3	3	1.9
26- 40	4	2.4	6	3.8
41-100	8	5	4	2.5
101-200	7	4.3	4	2.5
200<	2	1.3	1	0.7

S = number of species

total yearcatches of ridge and drain was calculated using several diversity indices (table IV). The *Shannon* index [H(S)] points to almost equal catch diversities for ridge and drain [H(159) = 5.27 and H(162) = 5.37 respectively]. Other diversity indices give similar results (table IV).

TABLE IV

Catchdiversities of ridge and drain

Diversity indices of Mc Intosh :	ridge	drain
$P = \frac{N - U}{N - \sqrt{N}}$ (indep. of N)	0.797	0.799
$Q = \frac{N - U}{N - \frac{N}{\sqrt{S}}}$ (evenness)	0.850	0.848
<i>Simpson index :</i> $D = 1 - \frac{\sum (N_s - 1) N_s}{N(N - 1)}$	0.953	0.953
<i>Margaleff index :</i> $D = \frac{S - 1}{\ln N}$	19.86	21.11
<i>Shannon index : H(S)</i>	H(159) = 5.27	H(162) = 5.37

e) Comparison on family level

The procentual portion (calculated on total numbers captured) of the most captured families (Staphylinidae, Catopidae, Carabidae, Scydmaenidae, Pselaphidae and Dytiscidae) is mostly identical in the two microhabitats (fig. 1).

The « species-richness » for each of these families is also mostly equal (table V).

TABLE V
Species-richness per family

Families	ridge	drain	common	Families	ridge	drain	common
Carabidae	20	21	13	Ptilidae	2	1	1
Staphylinidae	50	53	38	Coccinellidae	1	2	—
Dytiscidae	6	5	4	Cryptophagidae	6	7	5
Pselaphidae	3	4	3	Cantharidae	1	2	1
Scydmaenidae	2	2	2	Nitidulidae	1	3	1
Silphidae	1	—	—	Rhizophagidae	3	2	2
Catopidae	7	10	7	Endomychidae	1	1	1
Elateridae	5	2	2	Anobiidae	1	—	—
Chrysomelidae	3	4	2	Byrrhidae	2	2	2
Curculionidae	16	13	10	Aspidophoridae	1	—	—
Eucnemidae	1	1	1	Ipidae	4	3	3
Liodidae	5	7	5	Scaphidiidae	2	—	—
Lathridiidae	4	3	3	Scarabeidae	1	1	1
Hydrophilidae	4	6	3	Tenebrionidae	1	—	—
Hydraenidae	3	5	2	Clambidae	—	1	—
Phalacridae	2	1	1				

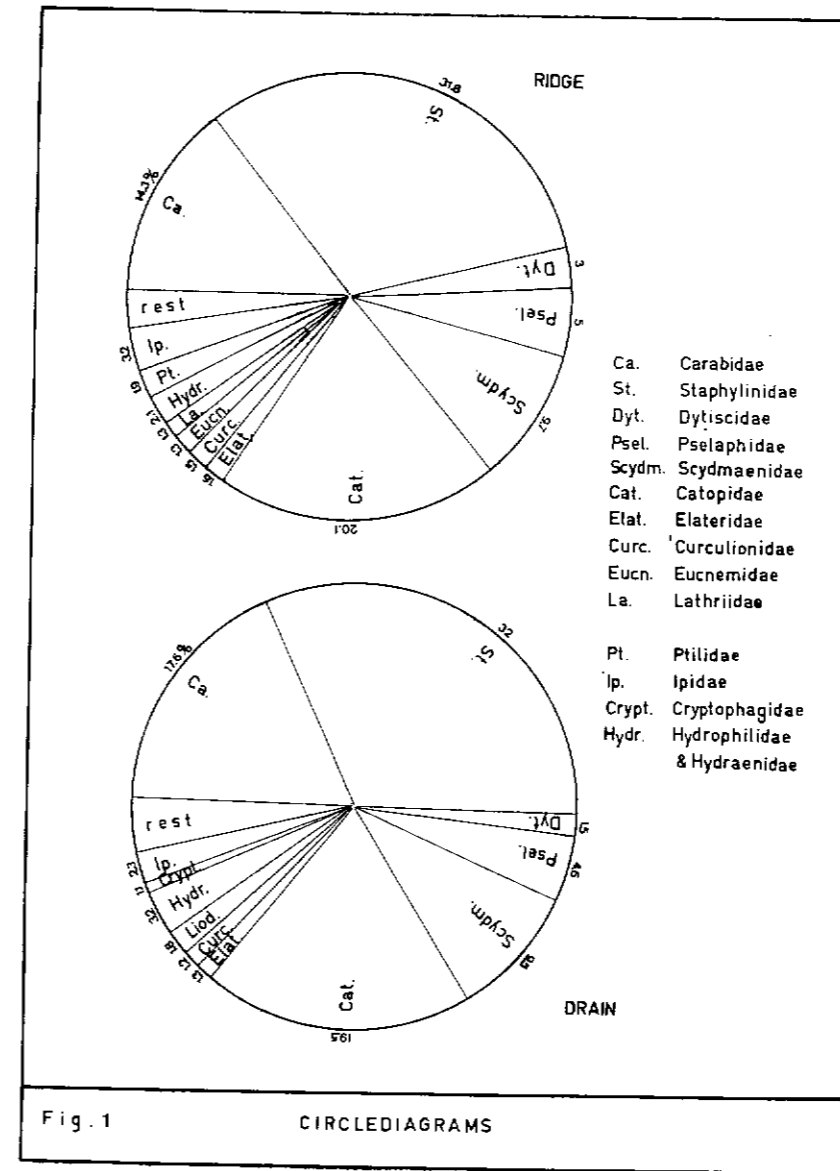
The Staphylinidae were far the most caught beetles in both habitats [most individuals ($\pm 32\%$) and most species]. The Catopidae are represented by less species than the Carabidae, but were caught more numerous.

IV. Summary

From 30 April 1972 until 26 April 1973 two microhabitats were sampled with pitfall-traps to investigate if the difference in microrelief could influence the fauna-composition and catchfrequency.

The species composition did not reveal great differences between ridge and drain. The calculated diversity indices pointed to nearly equal catchdiversities.

The species, which were captured most frequently were found on the ridge as well in the drain, although they had in most cases a higher activity-density (abundancy) on the ridge. Six species were found predominantly active on the ridge (not a single one in the drain).



- Ca. Carabidae
- St. Staphylinidae
- Dyt. Dytiscidae
- Psel. Pselaphidae
- Scydm. Scydmaenidae
- Cat. Catopidae
- Elat. Elateridae
- Curc. Curculionidae
- Eucn. Eucnemidae
- La. Lathriidae
- Pt. Ptilidae
- Ip. Ipidae
- Crypt. Cryptophagidae
- Hydr. Hydrophilidae & Hydraenidae

The pitfall-captures carried out in the two microhabitats are characterised by a great amount of species of which only some were caught in great numbers.

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SYNECOLOGICAL STUDY OF SURFACE-ACTIVE ARANEAE FROM WOOD- AND MEADOWHABITATS*

by H. VAN PRAET**

Abstract

Araneae were collected by pitfall trapping in wood- and meadowhabitats. A qualitative synecological comparison was made between Araneae captured in the studied habitats.

Introduction

Between 1971 and 1974 a number of biotopes around Ghent were sampled with pitfall-traps.

This paper offers a synecological approach of the surface-active Araneae-fauna using pitfall-data.

Habitats

Data were obtained for 5 habitats :

1. An oak-beech wood (the « Breedgrashouw », a part of the Aelmoeseneibos at Gontrode) was sampled between 1971 and 1974 (HOET, 1972 ; MAELFAIT, 1973 ; LAMPO, 1975). For a detailed description, see MAELFAIT & BAERT (1975).

2. A beech wood or « *Fagetum nudum* » biotope (the « Hutsepot » at Zwijnaarde) was sampled between 1972 and 1973 (BOSMANS, 1973). Detailed description, see MAELFAIT & BAERT (1975).

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