

**Appendix**

## Appendix

### Compendium of Figures and Tables in the Appendix

	page
Table AT0: Individual camels in the research paddock	251-253
 <b>Part I :</b>	
<b>NUTRITION ECOLOGY</b>	
Table AT1: List of food plants of the dromedary in central Australia	254-259
Table AT2: Nutritive value and mineral contents of some food plants	260-263
Fig. A1.1-12: Identified plant species in the research paddock in alphabetical order with observed use over the entire study period 1986-1989	264-269
Fig. A2.1-93: Quantitative food selection from random samples Arrangement according to landscape type and date; size of random samples = 100 bites each; circular distribution shows the proportion of top feed and ground vegetation; location given in grid squares.	270-300
Fig. A3.1-52: Quantitative food selection from continuous observations, Arrangement according to landscape type and date; size of random samples indicated accordingly; circular distribution shows the proportion of top feed and ground vegetation; location given in grid squares.	301-318
Fig. A4.1-35: Diagram of the 10 mainly eaten food plants per month; results of the observed intakes of food plants at each sighting.	319-330
Fig. A5.1a-12c: Analyses of ground vegetation from permanent transects	331-342
Fig. A6.1-27: Analyses of ground vegetation from random samples	343-351
Fig. A7.1-25: Vegetationanalyses of trees & shrubs	352-360
Fig. A8.1-18: Quantitative food selection of tame free-ranging dromedaries on the stations Todd River and Ringwood	361-366
Fig. A9. 1a-4b: Summarized comparison of the seasonal supply/use relation in the four landscape types	367-378
Fig. A9. 5-19: Further examples of the supply/use relation	379-393

## DRINKING FREQUENCIES

Table AT3.1: Results of the significance test of seasonal drinking frequencies 394-395

Table AT3.2: Results of the significance test of drinking frequencies depending on gender and age 396

## HABITAT USE

Fig. A10.1-3: Monthly classified habitat use 397-399

Table AT4.1: Richness, diversity and evenness indices of the habitat specific vegetation 400-402

Table AT4.2: Richness, diversity and evenness indices of the ground vegetationanalyses from permanent transects 403

Table AT4.3: Richness, diversity and evenness indices of the ground vegetationanalyses from random samples 404

Table AT4.4: Richness, diversity and evenness indices of the vegetationanalyses of trees & shrubs 405

## RANGE UTILIZATION

Fig. A11.1-18: Examples of range utilization 406-411

## ACTIVITY PATTERNS

Fig. A12.1-12: Examples of the activity patterns in relation to air temperature from the monthly recorded time-budgets. 412-415

## MEASUREMENT OF THE BODY TEMPERATURE

Fig. A13.1-6: Temperature curves and their variation ranges of six examined dromedaries 416-421

Fig. A13.7: Temperature curve of the female N8 with and without fever 422

Fig. A13.8: Temperature ranges of all examined dromedaries 422

Fig. A13.9: Temperature curve of two tame dromedary females of a camel farm that were examined in summer. 422

## Part II

Fig. A14.1-10: Analyses of group structures	423-426
Fig. A15: Further examples of the social life of 10 adult cows	427
Fig. A16.1-2: Comparison of activities from adult bulls according to the season	428-429
Table AT5: Percentual day activity of 9 adult bulls	430
Table AT6: Significance test of the proportional day activity of 9 adult bulls according to the Wilcoxon-test.	431
Fig. A17.1-5: Comparison of activities from adult cows according to their hormonal status	432-436
Table AT7: Significance test of the proportional day activity of 23 adult cows at the time of the estrus compared with times in which the cows were not in estrus	437
Fig. A17.1-6: Further evaluations of nearest neighbor relationships	438-443



Table AT0: Individuals in the research paddock

legend: see page 253

name	abbr.	sex	age	Σ sightings	dur. of observ.	remarks
N1/13	13	m	s.ad.	2008	GU	
N1/14	14	m	s.ad.	2198	GU	
alter Alter	aA	m	ad.	1353	GU	
Andreas	Ad	m	ad.	12	25.06.87-30.08.87	died
Alice	Al	f	fo.	173	* 26.08.89	daughter of Hb
Anne	An	f	fo.-s.ad.	531	* 12.08.88	daughter of KW
Astrid	As	f	ad.	3061	GU	
Bierdeckel	Bd	m	ad.	1683	04.11.86-19.07.88	died after fight
Ben	Be	m	fo.-s.ad.	1014	since 25.06.87	son of We
B-chen	Bi	f	fo.-s.ad.	2514	* 29.08.87	daughter of H1
Bodo	Bo	m	fo.	402	* 18.06.89	son of T1
Christoph	Ch	m	fo.-s.ad.	1946	* 14.09.87	son of As
Cleo	Cl	f	ad.	532	since 22.01.89	
David	Da	m	fo.	258	* 23.07.89	son of KH
erfahrene Alte	eA	f	ad.	2436	GU	
Ede	Ed	m	ad.	512	since 22.07.88	
Emma	Em	f	ad.	721	since 22.01.89	
Esther	Es	f	fo.	523	* 20.11.88	daughter of N16
Franziska	Fa	f	ad.	389	since 22.01.89	
Fremder	Fd	m	ad.	1290	since 04.11.86	
Floh	Fl	m	fo.	208	* 01.05.89	son of H4
Fidel	Fi	m	s.ad.	143	since 11.08.88	
Frank	Fr	m	s.ad.-ad.	716	since 06.07.88	
George	Gg	m	fo.	664	* 29.10.88	son of T2
Greg	Gr	m	s.ad.	44	since 04.08.89	
Gustav	Gu	m	fo.-s.ad.	2250	* 30.08.86	son of T3
Gypsy	Gy	f	fo.	173	* 03.08.89	daughter of H1
Halsband 1	H1	f	ad.	3245	GU	
Halsband 2	H2	f	ad.	3352	GU	
Halsband 3	H3	f	s.ad.-ad.	3422	GU	
Halsband 4	H4	f	ad.	2992	GU	

Table AT0: Individuals in the research paddock

name	abbr.	sex	age	Σ sightings	dur. of observ.	remarks
Harvey	Ha	m	fo.-s.ad.	865	since 25.06.87	son of Tr
Hellbraune	Hb	f	ad.	2045	since 25.06.87	
Herrmann	He	m	ad.	790	02.08.86-30.09.86	
					since 14.04.88	
Helle	Hl	f	s.ad.-ad.	1856	since 25.06.87	
Hansi	Hn	m	ad.	25	22.04.88-12.06.88	
Howard	Ho	m	ad.	2012	since 22.05.87	
I-chen	In	f	fo.-s.ad.	2262	* 16.07.87	daughter of T1
Jackson	Ja	m	fo.	371	* 19.06.89	son of RT
Jeanette	Je	f	ad.	451	since 30.04.89	
Jeremy	Jr	m	s.ad.	128	since 04.08.89	
K-chen	Ka	f	fo.-s.ad.	3503	* 04.11.86	daughter of Kl
Klapphöcker	KH	f	ad.	3106	GU	
Klappi	Kl	f	ad.	3191	GU	
Kora	Ko	f	fo.-s.ad.	1869	* 06.10.87	daughter of KH
Klappsohn	KS	m	fo.-s.ad.	2030	GU	son of KH
Kurt	Ku	m	fo.	4	* 09.09.89	son of We
Kleine Wedge	KW	f	ad.	1408	since 25.06.87	
Lothar	Lh	m	ad.	26	since 25.06.89	
Lotta	Lo	f	s.ad.-ad.	1703	since 15.02.88	
mit	m	m	s.ad.	1503	02.08.86-28.03.88	
Manfred	Ma	m	ad.	432	since 16.06.88	
Michele	Mi	f	ad.	532	since 22.01.89	
Mo	Mo	f	fo.-s.ad.	1915	* 20.10.87	daughter of RT
Mushroom	Mu	m	ad.	14	31.08.87-15.09.87	
N1/16	N16	f	ad.	2723	GU	
N1/8	N8	f	s.ad.-ad.	3557	GU	
N1/9	N9	f	ad.	1224	02.08.86-11.01.88	died
Nena	Ne	f	fo.	14	* 12.09.89	daughter of Pf
Norbert	No	m	fo.	284	* 23.06.89	son of H2
not yet	ny	m	s.ad.-ad.	282	since 08.09.88	
ohne	o	m	s.ad.	1411	GU	
Ophelia	Op	f	fo.	21	* 17.09.89	daughter of Tr

Table AT0: Individuals in the research paddock

name	abbr.	sex	age	Σ sightings	dur. of observ.	remarks
Paula	Pa	f	fo.-s.ad.	2441	* 19.09.87	daughter of Pf
Pfeife	Pe	m	ad.	59	10.09.86-22.12.86	died
Pfeilstute	Pf	f	ad.	3048	GU	
Ruth	Rh	f	ad.	208	22.01.89-29.03.89	died
Riese	Ri	m	ad.	1367	since 04.11.86	
Rod	Ro	m	s.ad.	66	since 04.08.89	
Rippensohn	RS	m	fo.-s.ad.	1402	GU	son of RT
Rippentier	RT	f	ad.	2838	GU	
Rudi	Ru	m	s.ad.	481	since 10.06.88	
Schwarzer	Sc	m	s.ad.	1146	02.08.86-12.08.88	
Siggi	Si	m	fo.	677	* 15.09.88	son of T4
Schwarznase	Sn	m	fo.-s.ad.	2307	* 04.11.86	son of N16
Tel 1	T1	f	ad.	3060	GU	
Tel 2	T2	f	ad.	2696	GU	
Tel 3	T3	f	ad.	1437	02.08.86-08.01.88	died
Tel 4	T4	f	s.ad.-ad.	2714	GU	
Teufel	Te	m	fo.-s.ad.	2314	* 03.11.86	son of Wd
Töchterchen	Tö	f	fo.-s.ad.	1885	02.08.86-25.09.88	daughter of H1, died
Träne	Tr	f	ad.	1797	since 25.06.87	
Telson	TS	m	fo.-s.ad.	1518	GU	son of T2
Trevor	Tv	m	s.ad.	46	since 04.08.89	
Ursel	Ur	f	fo.	257	* 23.07.89	daughter of As
Vivien	Vi	f	fo.	452	* 25.01.89	daughter of H1
Volker	Vo	m	fo.	671	* 31.10.88	son of eA
Wedge	Wd	f	ad.	2858	02.08.86-12.07.89	
Weiß	We	f	ad.	1960	since 25.06.87	
Wilhelm	Wh	m	fo.	9	* 15.09.89	son of Lo
Willi	Wi	m	fo.-s.ad.	801	since 25.06.87	Sohn von KW
Weißer	Wr	m	s.ad.-ad.	1070	GU	
X	x	m	s.ad.	119	25.06.87-02.02.88	

GU = individuum was under observation during the complete period of the studies

since = immigrated

\* = date of birth

all individuals were under observation until the end of the studies as long as there is no other information

Table AT1: List of food plants of the dromedary in central Australia

## Explanations:

NH = own observations in main study area Newhaven

RW = additional food plants from Ringwood Station

TR = additional food plants from Todd River Station

\* = abundant in the research paddock, use not observed

Family	Species		Record
Acanthaceae	Dipteracanthus australasicus	TR	
Aizoaceae	Aizoon zygophylloides		Newman
Aizoaceae	Trianthema triquetra	*	Newman
Amaranthaceae	Alternanthera angustifolia	NH	
Amaranthaceae	Alternanthera spec.	NH	
Amaranthaceae	Ptilotus astrolasius	NH	
Amaranthaceae	Ptilotus atriplicifolius	NH	Newman
Amaranthaceae	Ptilotus calostachyus	NH	
Amaranthaceae	Ptilotus clementii	NH	
Amaranthaceae	Ptilotus helipterioides	NH	
Amaranthaceae	Ptilotus latifolius	NH	
Amaranthaceae	Ptilotus macrocephalus	NH	
Amaranthaceae	Ptilotus obovatus	NH	
Amaranthaceae	Ptilotus polystachyus	NH	
Amaranthaceae	" var. rubiflorus	NH	
Apocynaceae	Carissa lanceolata		Newman
Asclepiaceae	Leichhardtia australis	NH	Newman
Boraginaceae	Heliotropium asperrimum	NH	
Boraginaceae	Heliotropium diversifolium	NH	
Boraginaceae	Heliotropium flaviflorum	NH	
Boraginaceae	Heliotropium ovalifolium	NH	
Boraginaceae	Heliotropium pleiopterum	NH	
Boraginaceae	Heliotropium spec.	NH	
Boraginaceae	Heliotropium tenuifolium	NH	
Brassicaceae	Blennodia canescens	NH	
Brassicaceae	Stenopetalum anfractum	NH	
Brassicaceae	Stenopetalum decipiens	NH	
Brassicaceae	Trichodesma zeylanicum	NH	Newman
Caesalpinaceae	Cassia artemisioides	NH	Newman
Caesalpinaceae	Cassia desolata	NH	Newman
Caesalpinaceae	Cassia nemophila	NH	
Caesalpinaceae	Cassia oligophylla	NH	
Caesalpinaceae	Cassia pleurocarpa	NH	Newman
Capparaceae	Capparis mitchellii	RW	Newman
Capparaceae	Capparis spinosa	TR	
Capparaceae	Cleome viscosa	NH	
Casuarinaceae	Allocasuarina decaisneana	NH	
Chenopodiaceae	Atriplex elachnophylla	RW	Newman
Chenopodiaceae	Atriplex limbata		Newman
Chenopodiaceae	Atriplex spec.	NH	
Chenopodiaceae	Atriplex semibaccata	NH	
Chenopodiaceae	Atriplex vesicaria		Newman
Chenopodiaceae	Chenopodium crispatum	NH	
Chenopodiaceae	Chenopodium melanocarpum	NH	
Chenopodiaceae	Chenopodium spec.	NH	
Chenopodiaceae	Dysphania plantaginella	NH	
Chenopodiaceae	Einadia nutans	NH	
Chenopodiaceae	Enchylaena tomentosa	NH	Newman
Chenopodiaceae	Eremophea spinosa	NH	

## Appendix

Chenopodiaceae	Halosarcia halocneimoides	NH	
Chenopodiaceae	Halosarcia spec.	NH	
Chenopodiaceae	Maireana astrotricha		Newman
Chenopodiaceae	Maireana luehmannii	NH	
Chenopodiaceae	Maireana planifolia		Newman
Chenopodiaceae	Maireana sclerolaenoides		RW
Chenopodiaceae	Maireana scleroptera		TR Newman
Chenopodiaceae	Maireana semibaccata		RW
Chenopodiaceae	Maireana spec.	NH	
Chenopodiaceae	Maireana triptera		Newman
Chenopodiaceae	Neobassia astrocarpa	NH	
Chenopodiaceae	Rhagodia eremaea		TR
Chenopodiaceae	Rhagodia spinescens	NH	
Chenopodiaceae	Salsola kali	NH	Newman
Chenopodiaceae	Sclerolaena andersonii		Newman
Chenopodiaceae	Sclerolaena birchii	NH	
Chenopodiaceae	Sclerolaena clelandii	NH	
Chenopodiaceae	Sclerolaena cornishiana	NH	
Chenopodiaceae	Sclerolaena deserticola	NH	
Chenopodiaceae	Sclerolaena diacantha	NH	Newman
Chenopodiaceae	Sclerolaena eriacantha	NH	
Chenopodiaceae	Sclerolaena johnsonii	NH	
Chenopodiaceae	Sclerolaena lanicuspis		Newman
Chenopodiaceae	Sclerolaena muricata	NH	
Chenopodiaceae	Sclerolaena parviflora	NH	
Chenopodiaceae	Sclerolaena spec.	NH	
Chenopodiaceae	Threlkeldia inchoata		Newman
Chloanthaceae	Newcastelia spodiotricha	*	Newman
Compositae	Brachycome ciliaris		RW
Compositae	Calocephalus platycephalus	NH	
Compositae	Calotis hispidula	NH	
Compositae	Calotis kempei		RW
Compositae	Calotis porphyroglossa	NH	
Compositae	Centipedia minima	NH	
Compositae	Helichrysum ambiguum	NH	
Compositae	" ssp. paucisetum	NH	
Compositae	Helichrysum apiculatum	NH	Newman
Compositae	Helichrysum ayersii	NH	
Compositae	Helichrysum cassinianum	NH	
Compositae	Helichrysum stipitatum	NH	
Compositae	Helipterum charsleyae	NH	
Compositae	Helipterum floribundum	NH	Newman
Compositae	Helipterum moschatum		TR
Compositae	Helipterum stipitatum	NH	
Compositae	Minuria denticulata	NH	
Compositae	Pluchea tetranthera	NH	
Compositae	Podolepis canescens	NH	
Compositae	Podolepis capillaris	NH	
Compositae	Pterocaulon serrulatum	NH	
Compositae	Pterocaulon sphacelatum	NH	
Compositae	Senecio gregorii	NH	
Compositae	Vittadinia arida	NH	
Compositae	Vittadinia eremeae	NH	
Compositae	Vittadinia pustulata	NH	
Convolvulaceae	Convolvulus erubescens		RW Newman
Convolvulaceae	Cuscuta victoriana	NH	
Convolvulaceae	Evolvulus alsinoides	NH	
Convolvulaceae	Ipomoea costata	NH	
Convolvulaceae	Ipomoea muelleri		Newman



## Appendix

Cruciferae	<i>Lepidium mueller-fernandii</i>	NH		
Cruciferae	<i>Lepidium phlebopetalum</i>	NH		
Cucurbitaceae	<i>Citrullus lanatus</i>		RW	Newman
Cyperaceae	<i>Bulbostylis barbata</i>	NH		
Cyperaceae	<i>Cyperus bulbosus</i>	NH		
Cyperaceae	<i>Fimbristylis dichotoma</i>	NH		
Euphorbiaceae	<i>Euphorbia australis</i>	NH		
Euphorbiaceae	<i>Euphorbia biconvexa</i>	NH		
Euphorbiaceae	<i>Euphorbia drummondii</i>	*		Newman
Euphorbiaceae	<i>Euphorbia eremophila</i>	*		Newman
Euphorbiaceae	<i>Euphorbia tannensis</i>	*		Newman
Euphorbiaceae	<i>Phyllanthus fuernrohrrii</i>	NH		
Fabaceae	<i>Crotalaria cunninghamii</i>	NH		
Fabaceae	<i>Crotalaria eremea</i>	NH		
Fabaceae	" <i>ssp.strelowii</i>	NH		
Fabaceae	<i>Crotalaria smitheana</i>		RW	
Fabaceae	<i>Dalbergia sissoo</i>			Newman
Fabaceae	<i>Galactia tenuiflora</i>	NH		
Fabaceae	<i>Glycine canescens</i>	*		Newman
Fabaceae	<i>Glycine falcata</i>	NH		
Fabaceae	<i>Indigofera basedowii</i>	NH		
Fabaceae	<i>Indigofera georgei</i>			Newman
Fabaceae	<i>Indigofera linnaei</i>	NH		
Fabaceae	<i>Melilotus parviflora</i>			Newman
Fabaceae	<i>Ptychosema anomalum</i>	NH		
Fabaceae	<i>Rhynchosia minima</i>	NH		
Fabaceae	<i>Swainsona burkei</i>	NH		
Fabaceae	<i>Swainsona cyclocarpa</i>	NH		
Fabaceae	<i>Swainsona flavicarinata</i>	NH		
Fabaceae	<i>Swainsona laciniata</i>	NH		
Fabaceae	<i>Swainsona microphylla</i>	NH		
Fabaceae	<i>Swainsona phacoides</i>	NH		
Fabaceae	<i>Swainsona unifoliata</i>	NH		
Frankeniaceae	<i>Frankenia cordata</i>	NH		
Goodeniaceae	<i>Dampiera candidans</i>	NH		
Goodeniaceae	<i>Goodenia armitiana</i>	NH		
Goodeniaceae	<i>Goodenia lunata</i>	*		Newman
Goodeniaceae	<i>Goodenia virgata</i>	NH		
Goodeniaceae	<i>Leschnaultia divaricata</i>	NH		Newman
Goodeniaceae	<i>Scaevola collaris</i>	NH		
Goodeniaceae	<i>Scaevola collina</i>	NH		
Goodeniaceae	<i>Scaevola ovalifolia</i>	NH		
Goodeniaceae	<i>Scaevola parvibarbata</i>	NH		
Goodeniaceae	<i>Scaevola parvifolia</i>	NH		
Goodeniaceae	<i>Scaevola spinescens</i>	NH		
Gyrostemonaceae	<i>Codonocarpus continiifolius</i>	NH		Leitch
Lauraceae	<i>Cassytha filiformis</i>	NH		
Loranthaceae	<i>Amyema maidenii</i>	NH		Newman
Loranthaceae	<i>Amyema preissii</i>		RW	
Loranthaceae	<i>Lysiana exocarpi</i>	NH		
Malvaceae	<i>Abutilon fraseri</i>	NH		
Malvaceae	<i>Abutilon otocarpum</i>	NH		Newman
Malvaceae	<i>Lawrenzia glomerata</i>	NH		
Malvaceae	<i>Lawrenzia squamata</i>	NH		
Malvaceae	<i>Malvastrum americanum</i>	NH		
Malvaceae	<i>Sida corrugata</i>			Newman
Malvaceae	<i>Sida cunninghamii</i>	NH		
Malvaceae	<i>Sida everistiana</i>	NH		
Malvaceae	<i>Sida fibulifera</i>	NH		

## Appendix

Malvaceae	Sida platycalyx	NH		
Marsileaceae	Marsilea exarata	NH		
Mimosaceae	Acacia adsurgens	NH		
Mimosaceae	Acacia ammobia	NH		
Mimosaceae	Acacia aneura	NH		Williams
Mimosaceae	Acacia cambagei		RW	Newman
Mimosaceae	Acacia dictyophleba			Newman
Mimosaceae	Acacia estrophiolata		TR	Siebert&Macf.
Mimosaceae	Acacia farnesiana			Newman
Mimosaceae	Acacia georgina		RW	
Mimosaceae	Acacia jennerae	NH		
Mimosaceae	Acacia kempeana	NH		Williams
Mimosaceae	Acacia ligulata	NH		Newman
Mimosaceae	Acacia maitlandii	NH		
Mimosaceae	Acacia mearnsii			Leitch
Mimosaceae	Acacia pruniocarpa	NH		
Mimosaceae	Acacia ramulosa	NH		
Mimosaceae	Acacia sessiliceps	NH		
Mimosaceae	Acacia tetragonophylla	NH		Newman
Mimosaceae	Acacia victoriae	NH		Newman
Myoporaceae	Eremophila duttonii	NH		
Myoporaceae	Eremophila elderi			Newman
Myoporaceae	Eremophila freelingii		TR	
Myoporaceae	Eremophila latrobei	NH		
Myoporaceae	Eremophila longifolia	NH		Newman
Myoporaceae	Eremophila macdonnelli		RW	Newman
Myoporaceae	Eremophila willsii	NH		
Myrtaceae	Eucalyptus gamophylla	NH		Williams
Myrtaceae	Eucalyptus opaca	NH		
Myrtaceae	Eucalyptus papuana	NH		
Myrtaceae	Melaleuca glomerata	NH		
Myrtaceae	Melaleuca lasiandra	NH		
Nyctaginaceae	Boerhavia coccinea	NH		
Nyctaginaceae	Boerhavia diffusa			Newman
Nyctaginaceae	Boerhavia dominii	NH		
Nyctaginaceae	Boerhavia repleta	NH		
Nyctaginaceae	Boerhavia schomburgkiana	NH		
Nyctaginaceae	Boerhavia spec.	NH		
Oleaceae	Jasminum lineare			Newman
Pittosporaceae	Pittosporum phylliraeoides			Newman
Poaceae	Aristida biglandulosa			Newman
Poaceae	Aristida contorta	NH		
Poaceae	Aristida holathera	NH		
Poaceae	Aristida inaequiglumis	NH		
Poaceae	Astrebla pectinata			Newman
Poaceae	Brachiaria gilesii			Newman
Poaceae	Cenchrus ciliaris	NH		Newman
Poaceae	Cynodon dactylon	NH		
Poaceae	Dactyloctenium radulans	NH		Newman
Poaceae	Dichanthium affine	NH		
Poaceae	Dichanthium sericeum	NH		
Poaceae	Digitaria ammophila	NH		
Poaceae	Digitaria coenicola	NH		
Poaceae	Diplachne muelleri	NH		
Poaceae	Enneapogon avenaceus	NH		Newman
Poaceae	Enneapogon cylindricus	NH		Newman
Poaceae	Enneapogon polyphyllus	NH		Newman
Poaceae	Enteropogon acicularis	NH		
Poaceae	Enteropogon minutus	NH		

## Appendix

Poaceae	Eragrostis cumingii	NH	
Poaceae	Eragrostis dielsii	NH	Newman
Poaceae	Eragrostis eriopoda	NH	
Poaceae	Eragrostis falcata	NH	
Poaceae	Eragrostis lacunaria	NH	
Poaceae	Eragrostis leptocarpa	NH	
Poaceae	Eragrostis setifolia	NH	
Poaceae	Eriachne aristidea	NH	
Poaceae	Iseilema macrantherum	NH	
Poaceae	Iseilema vaginiflorum	NH	
Poaceae	Neurachne munroi	NH	
Poaceae	Panicum decompositum	NH	
Poaceae	Panicum effusum		Newman
Poaceae	Panicum spec.	NH	
Poaceae	Paractaenum novae-hollandiae	NH	
Poaceae	Paspalidium constrictum		Newman
Poaceae	Plagiosetum refractum	NH	
Poaceae	Plectrachne schinzii	NH	
Poaceae	Sporobolus caroli	NH	
Poaceae	Sporobolus virginicus	NH	
Poaceae	Tragus australianus	NH	Newman
Poaceae	Triepogon loliiformis	NH	Newman
Poaceae	Triodia basedowii	NH	
Poaceae	Triodia pungens	NH	
Poaceae	Triraphis mollis	NH	
Poaceae	Yakirra australiense	NH	
Polygonaceae	Muehlenbeckia cunninghamii	NH	Newman
Polygonaceae	Rumex versicarius		RW Newman
Portulacaceae	Calandrinia balonensis	NH	Newman
Portulacaceae	Calandrinia pleiopetala	NH	
Portulacaceae	Calandrinia sp.(undescr.)	NH	
Portulacaceae	Calandrinia stagnensis	NH	
Portulacaceae	Portulaca intraterranea	NH	Newman
Portulacaceae	Portulaca oleracea	NH	Newman
Portulacaceae	Portulaca pilosa	NH	
Proteaceae	Grevillea eriostachya	NH	
Proteaceae	Grevillea juncifolia	NH	Newman
Proteaceae	Grevillea stenobotrya	NH	Newman
Proteaceae	Grevillea striata	NH	
Proteaceae	Grevillea wickhamii	NH	
Proteaceae	Hakea divaricata	NH	
Proteaceae	Hakea eyreana		Siebert&Macf.
Proteaceae	Hakea leucoptera	NH	
Proteaceae	Hakea macrocarpa	NH	
Proteaceae	Hakea subera	NH	
Rhamnaceae	Ventilago viminalis	NH	
Rubiaceae	Canthium latifolium	NH	
Rubiaceae	Synaptantha tillaeacea		Newman
Santalaceae	Santalum lanceolatum		TR Newman
Sapindaceae	Atalaya hemiglauca	NH	Newman
Solanaceae	Nicotiana benthamiana		RW
Solanaceae	Nicotiana occidentalis	NH	
Solanaceae	Nicotiana rosulata	NH	
Solanaceae	Solanum centrale	NH	
Solanaceae	Solanum coactiliferum	NH	
Solanaceae	Solanum ellipticum	NH	
Solanaceae	Solanum quadriloculatum	NH	
Solanaceae	Solanum sturtianum	NH	
Sterculiaceae	Keraudrenia integrifolia	NH	

# Appendix

Sterculiaceae	Melhania oblongifolia	NH	
Stylobasiadaceae	Stylobasium spathulatum	NH	
Tetragoniaceae	Tetragonia eremaea		Newman
Thymelaceae	Pimela trichostachya	NH	
Verbenaceae	Clerodendrum floribundum	NH	
Violaceae	Hybanthus aurantiacus		TR
Violaceae	Hybanthus enneaspermus		TR
Zygophyllaceae	Tribulopsis angustifolia	NH	
Zygophyllaceae	Tribulus astrocarpus	NH	
Zygophyllaceae	Tribulus hirsutus	NH	
Zygophyllaceae	Tribulus hystrix		RW
Zygophyllaceae	Tribulus occidentalis	NH	
Zygophyllaceae	Tribulus terrestris	NH	Newman
Zygophyllaceae	Zygophyllum ammophilum	NH	Newman
Zygophyllaceae	Zygophyllum aurantiacum		Newman
Zygophyllaceae	Zygophyllum compressum	NH	
Zygophyllaceae	Zygophyllum idiocarpum	NH	
Zygophyllaceae	Zygophyllum spec.	NH	

Explanation to Table AT2:

Nutritive contents of some food plants of the dromedary

On the following three leaflets the analyses of the nutrients and tracer elements of some food plants of the dromedaries in central Australia are shown.

The analyses were carried out by the "Department of Primary Industries and Fisheries" in Alice Springs (1) and in Darwin (2).

The maximum (H), minimum (L) and average analysis values (A) are shown for all measured quantities.

CP, DM, P, Ca, S, Cl, K, Na, Mg and PCSOL are stated in %, Cu, Zn, Mn and Mo in ppm;

- in the table means **not measured**.

1 CP	= Crude Protein, (=total nitrogen x 6.25)
1 DM	= Dry matter digestibility; according to TILLEY & TERRY (1963)
1 P	= Phosphorus
1 Ca	= Calcium
1 S	= Sulfur
2 Cu	= Copper
2 Zn	= Zinc
2 Mn	= Manganese
2 Mo	= Molybdenum
1 PCSOL	= Pepsin Cellulase solubility; according to JONES & HAYWARD (1975)
2 K	= Potassium
2 Cl-	= Chloride
2 Na	= Sodium
2 Mg	= Magnesium

The abbreviations before the examined plant species indicate whether it is a grass (G), a forb (K) or a woody plant (H).





# Appendix

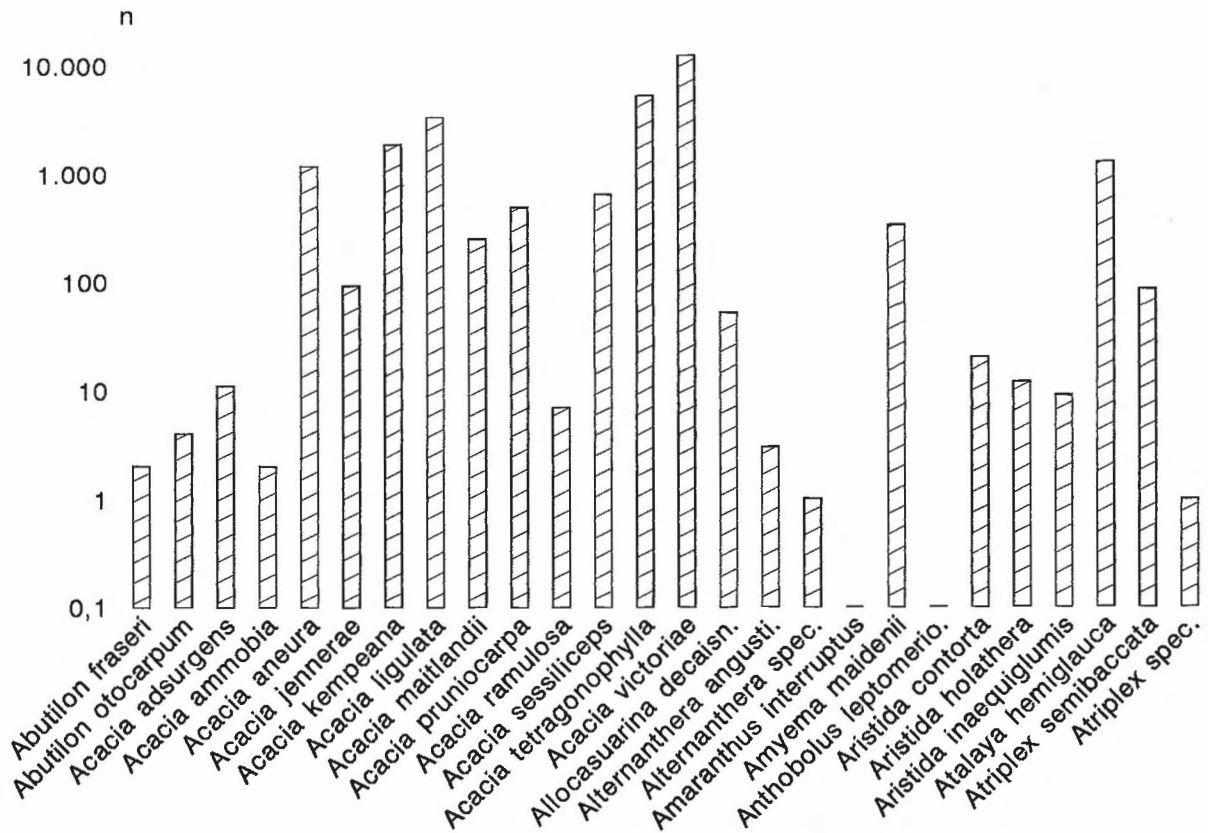


Fig. A1.1: Abundance and use of plant species in the research paddock (1)

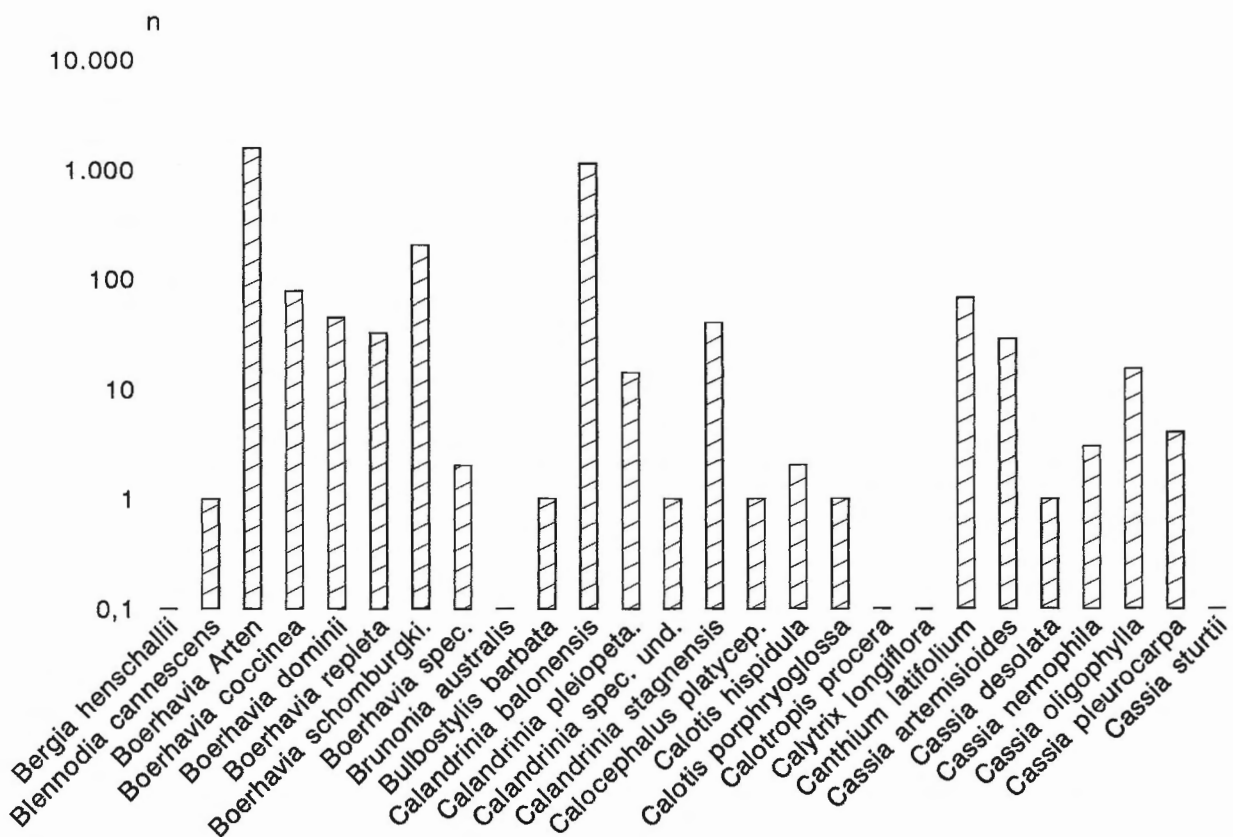


Fig. A1.2: Abundance and use of plant species in the research paddock (2)

# Appendix

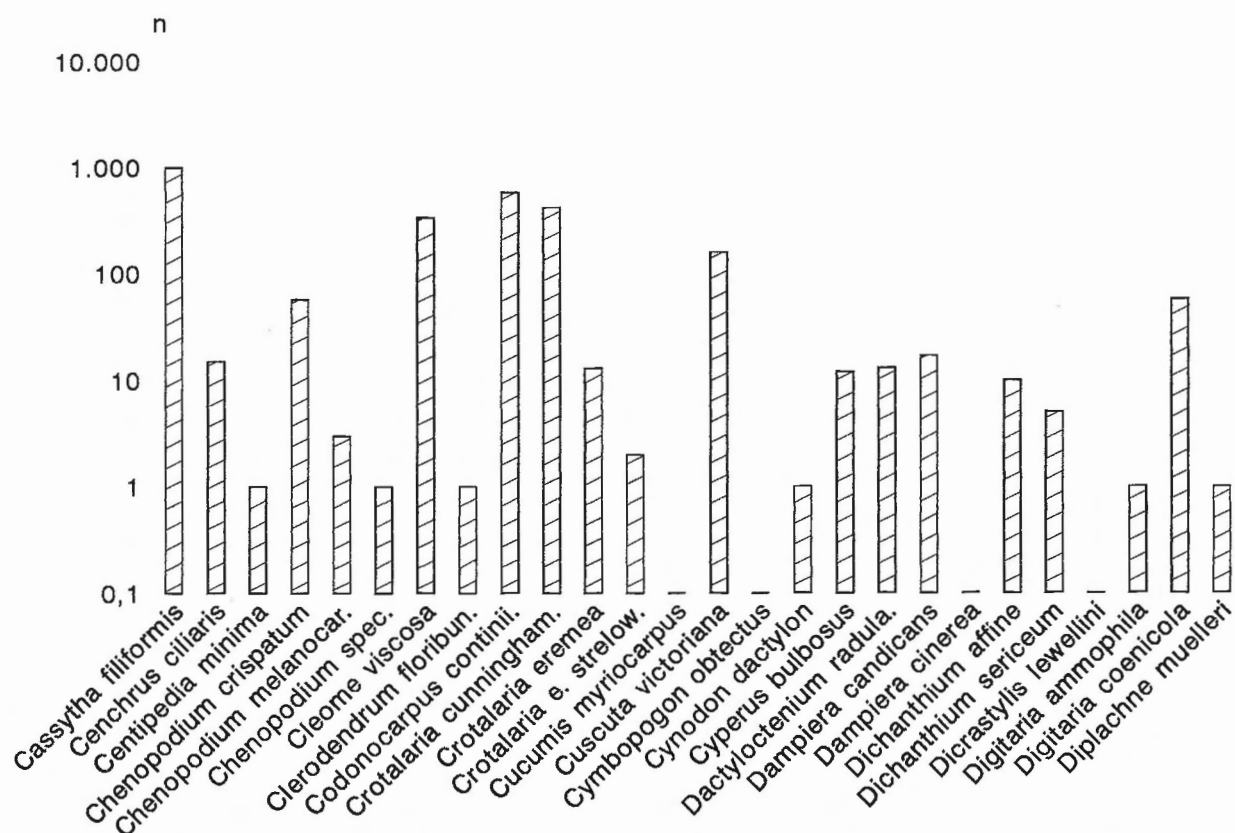


Fig. A1.3: Abundance and use of plant species in the research paddock (3)

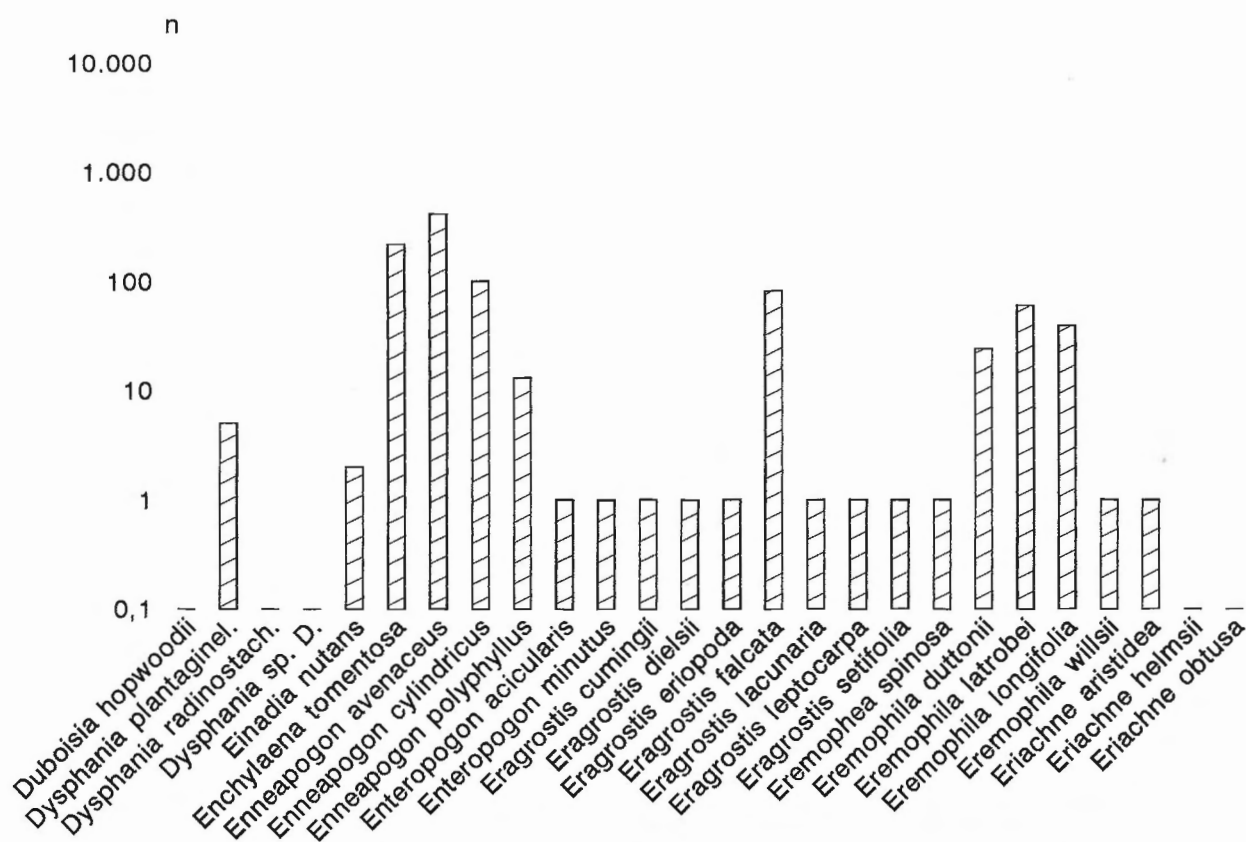


Fig. A1.4: Abundance and use of plant species in the research paddock (4)

# Appendix

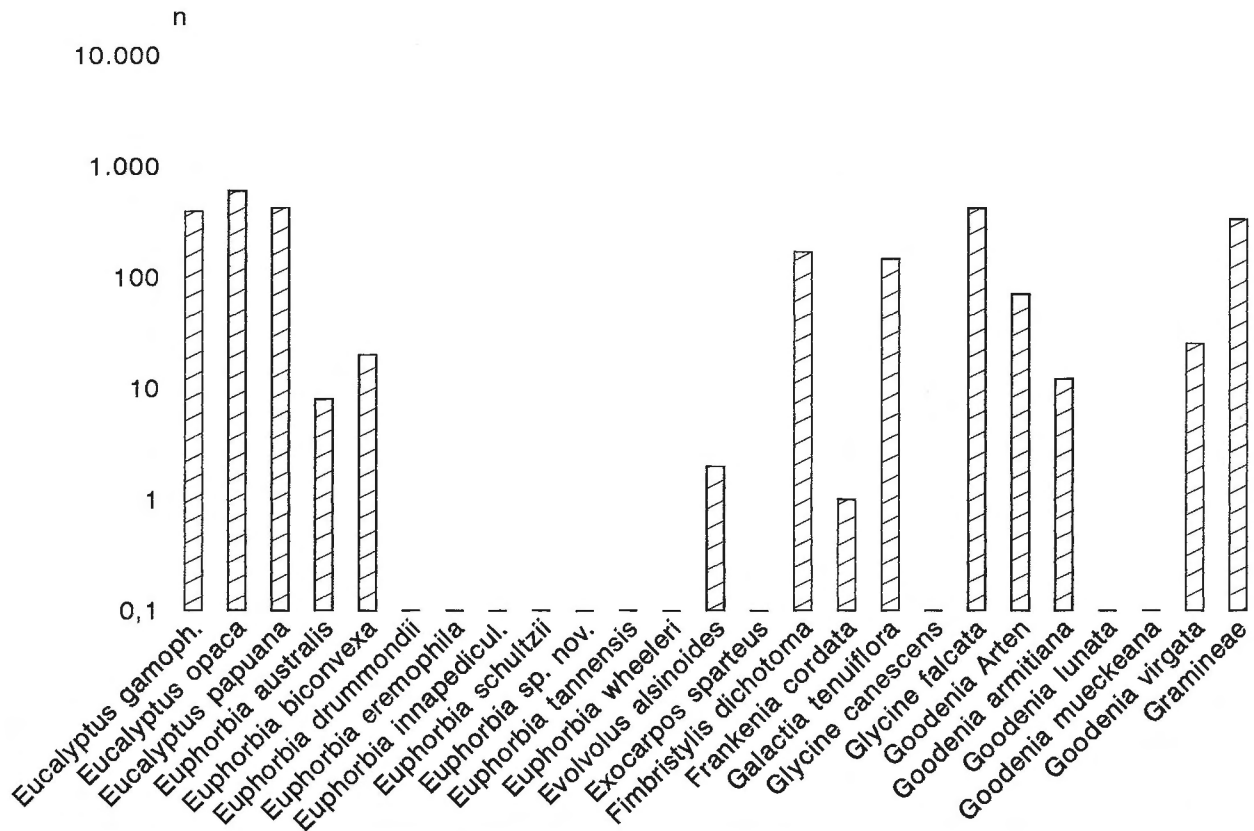


Fig. A1.5: Abundance and use of plant species in the research paddock (5)

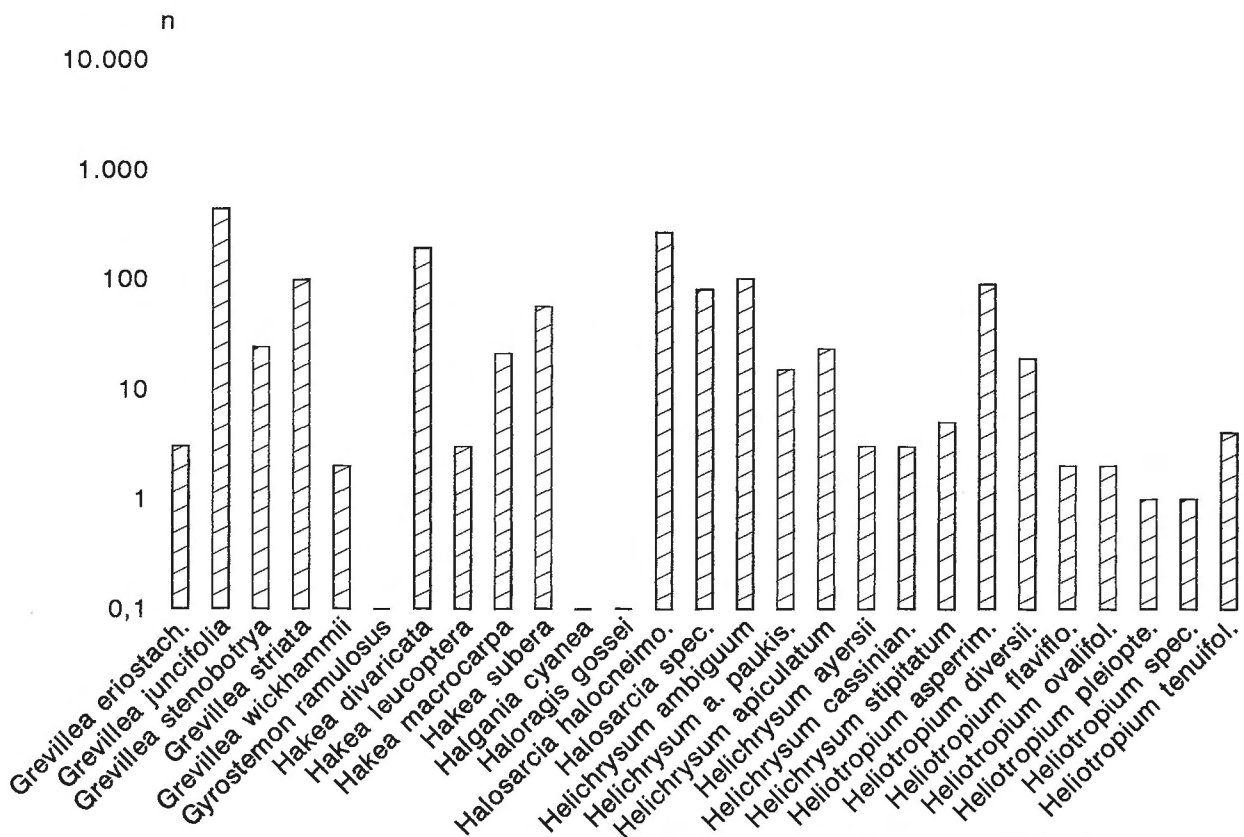


Fig. A1.6: Abundance and use of plant species in the research paddock (6)

## Appendix

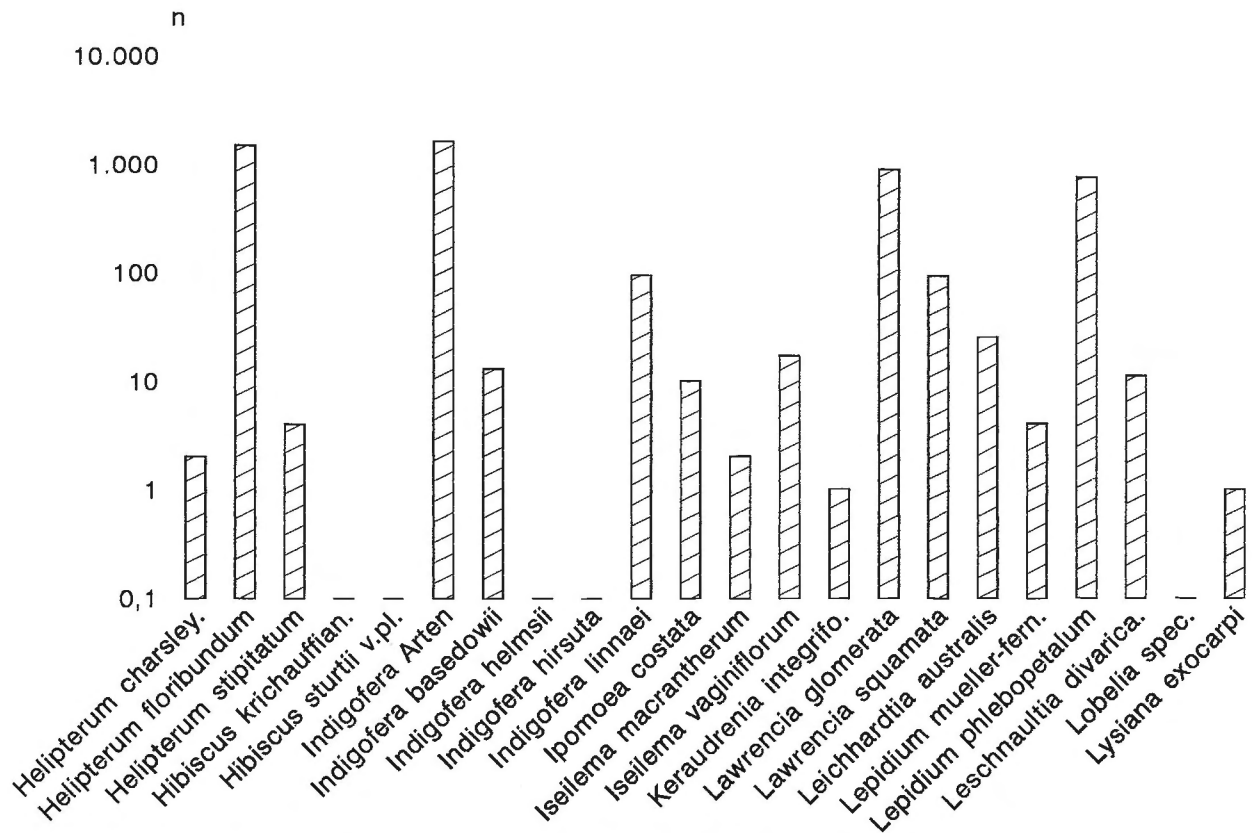


Fig. A1.7: Abundance and use of plant species in the research paddock (7)

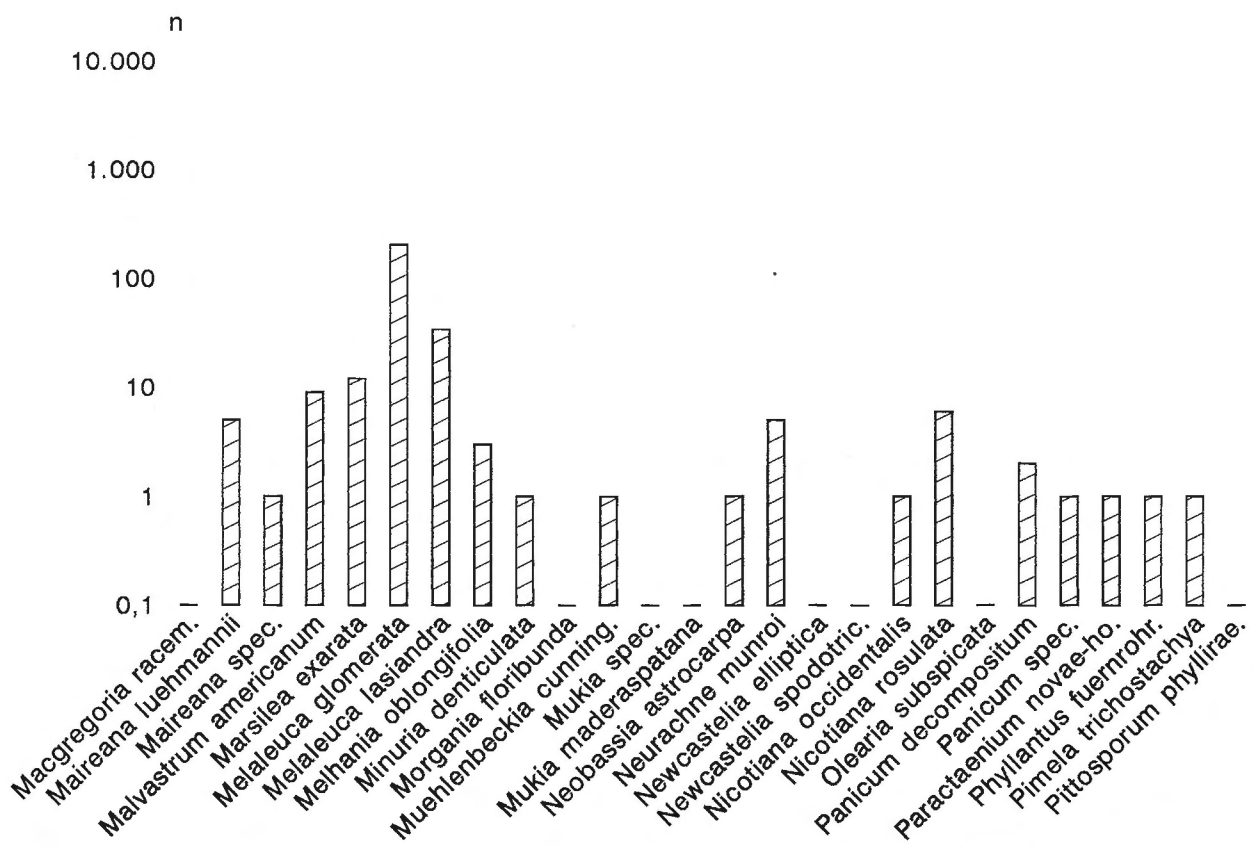


Fig. A1.8: Abundance and use of plant species in the research paddock (8)



# Appendix

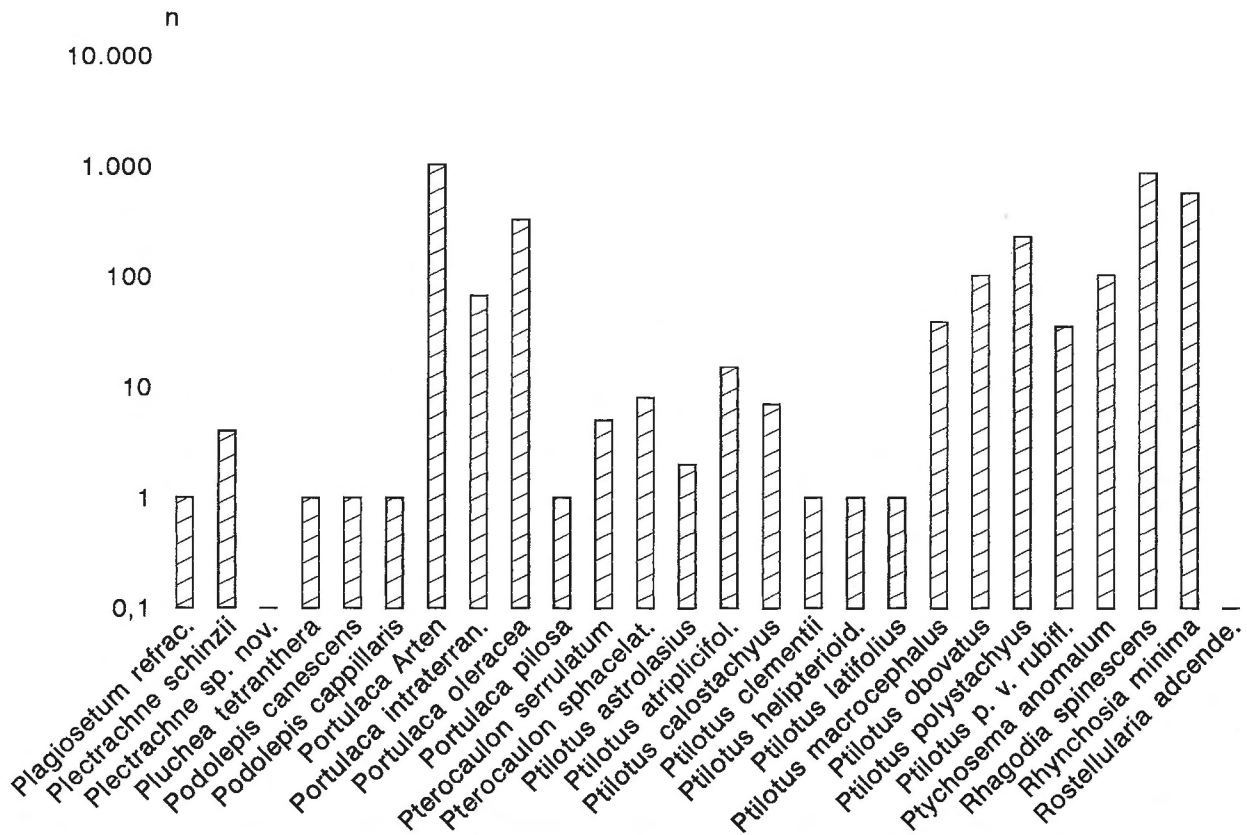


Fig. A1.9: Abundance and use of plant species in the research paddock (9)

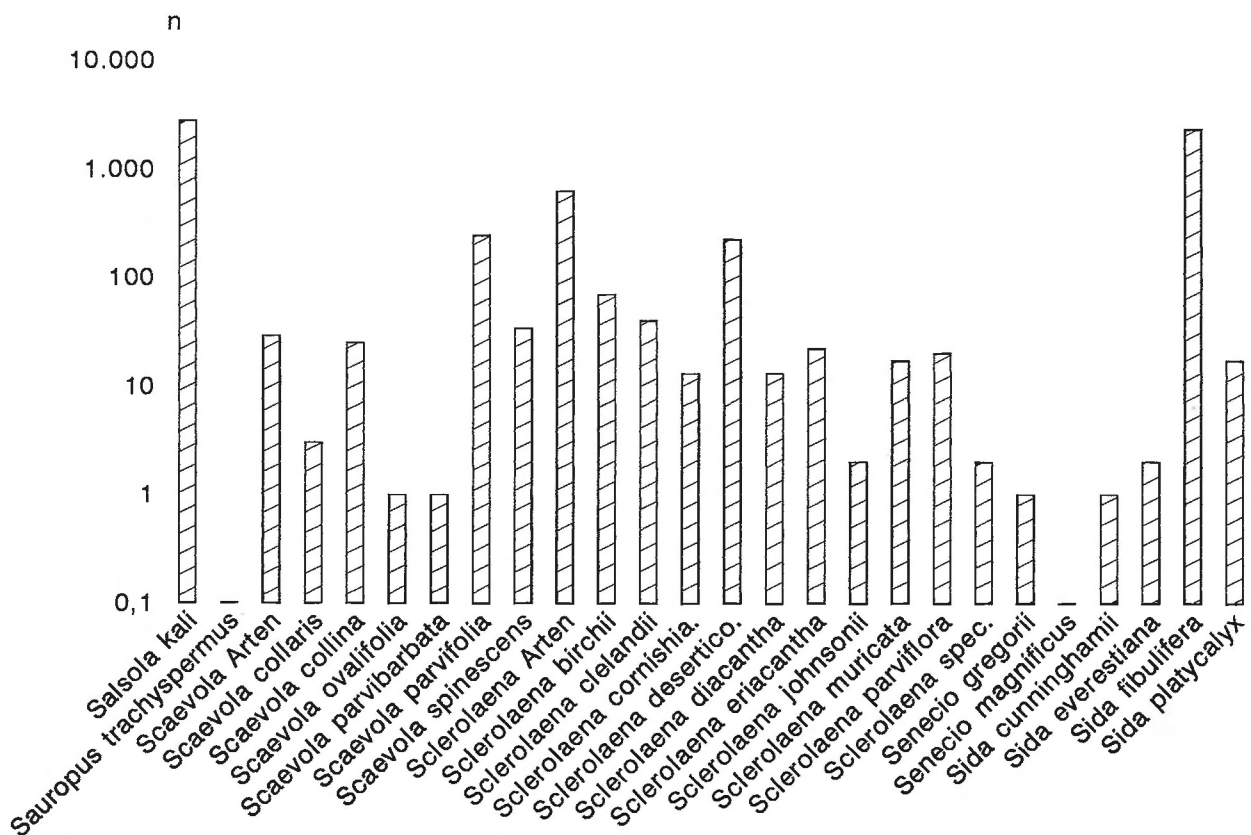


Fig. A1.10: Abundance and use of plant species in the research paddock (10)

# Appendix

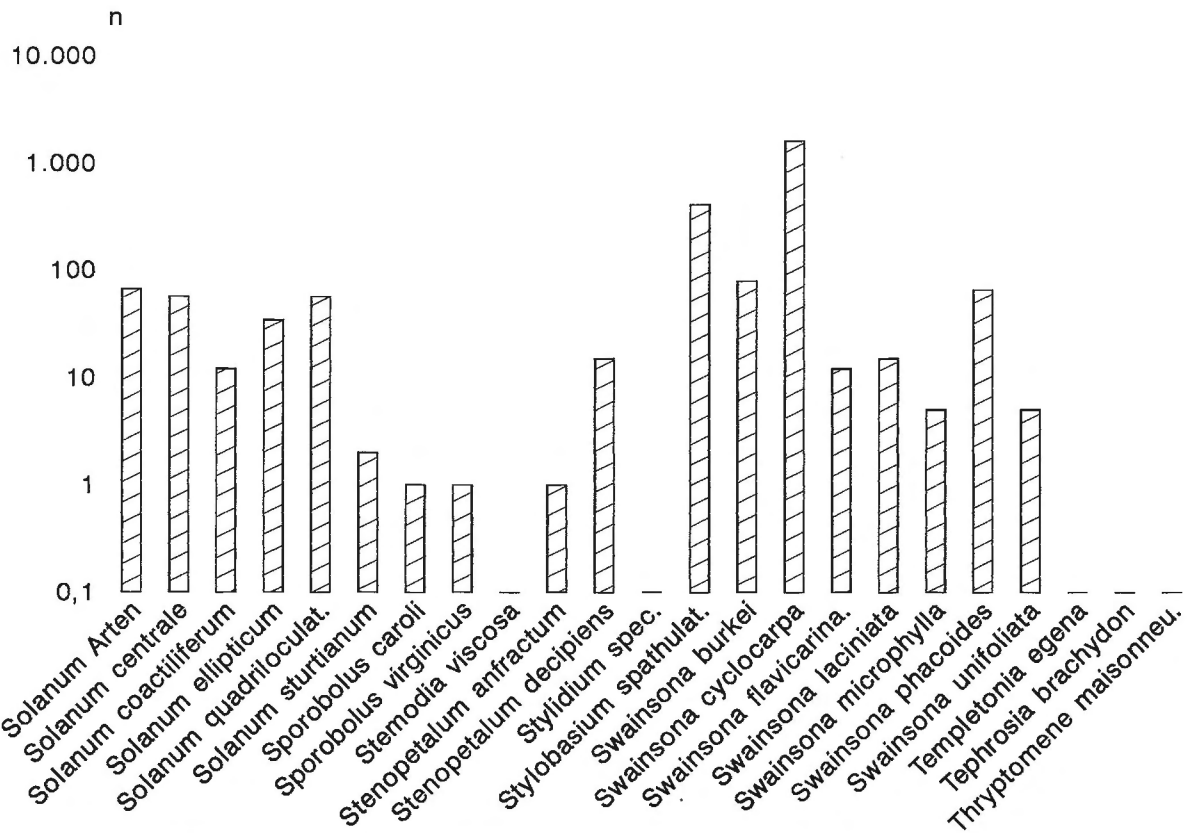


Fig. A1.11: Abundance and use of plant species in the research paddock (11)

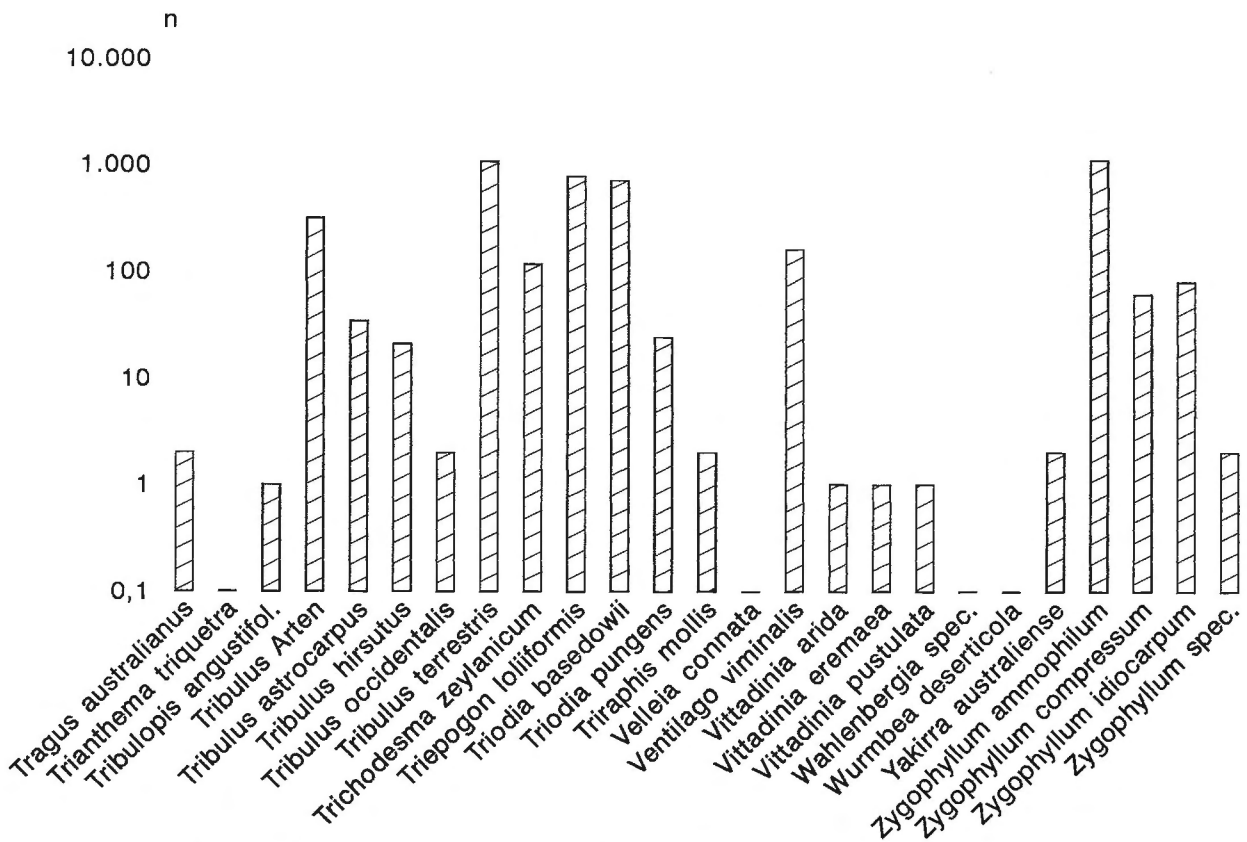


Fig. A1.12: Abundance and use of plant species in the research paddock (12)

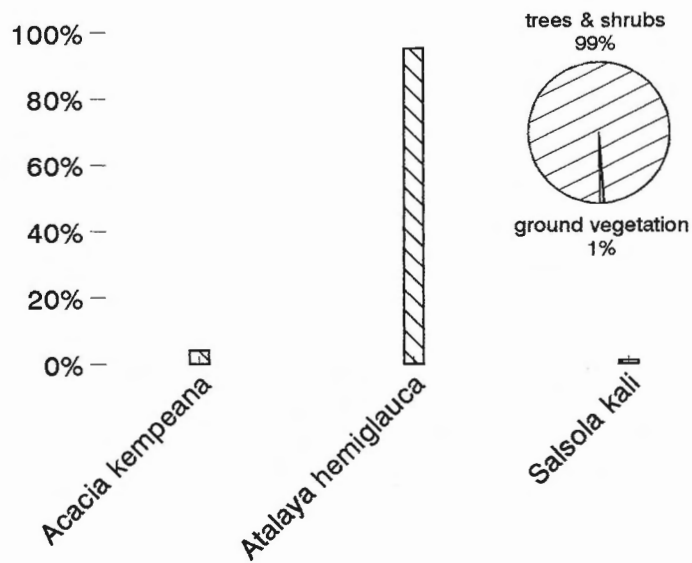


Fig. A2.1: bushland, 06.11.87, G 14

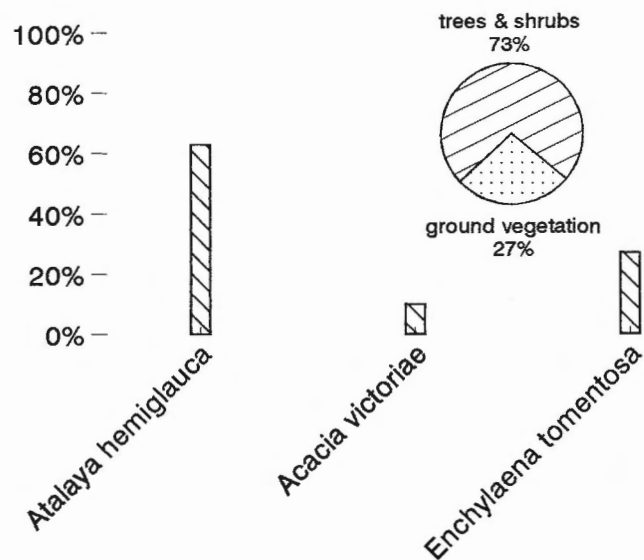


Fig. A2.2: bushland, 06.11.87, I 3

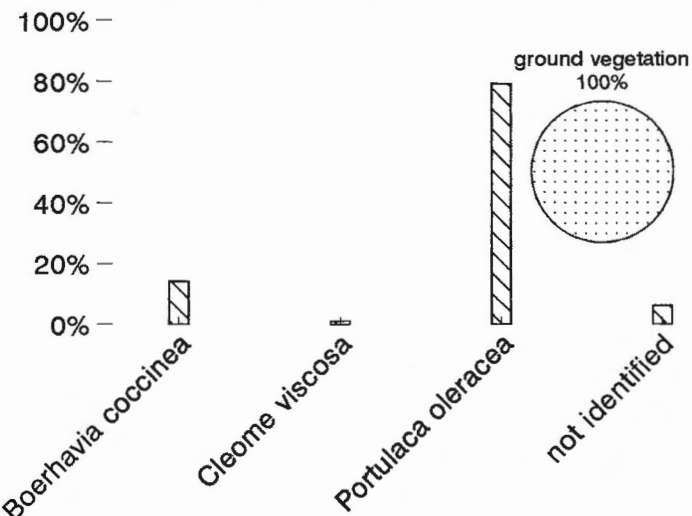


Fig. A2.3: bushland, 03.03.88, J2

Fig. A2.1-3: quantitative food selection from random samples

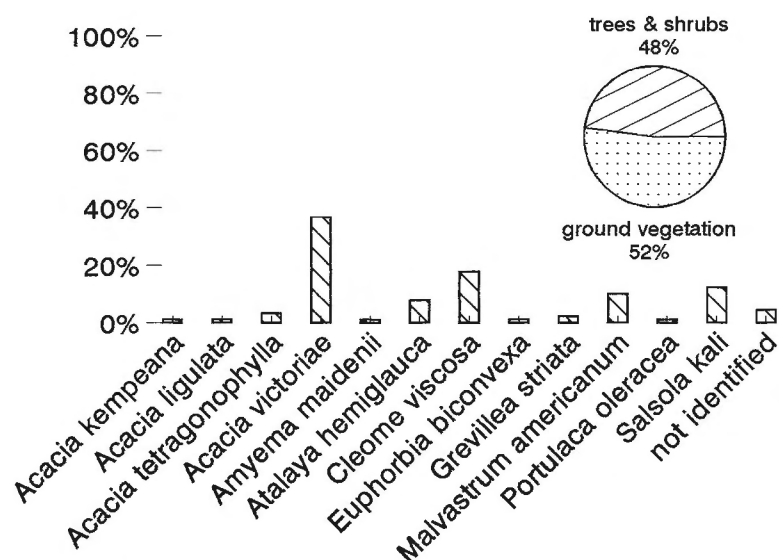


Fig. A2.4: bushland, 06.03.88, G 14

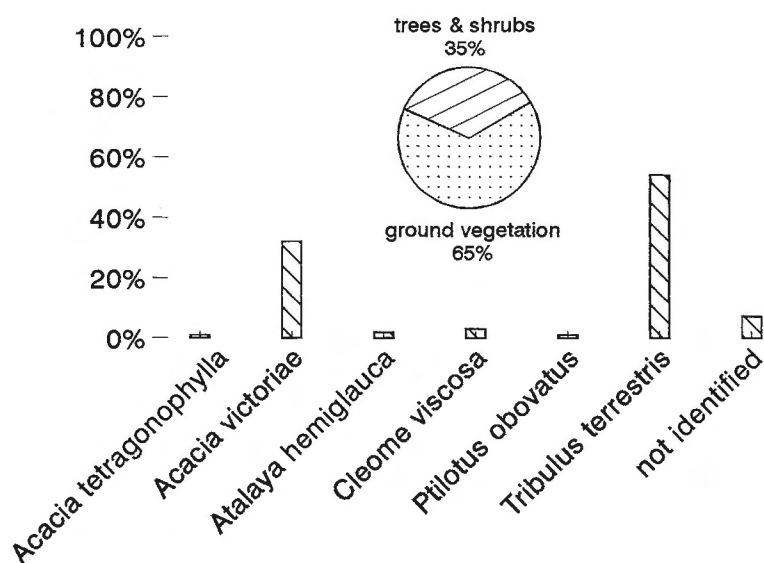


Fig. A2.5: bushland, 28.03.88, G 19

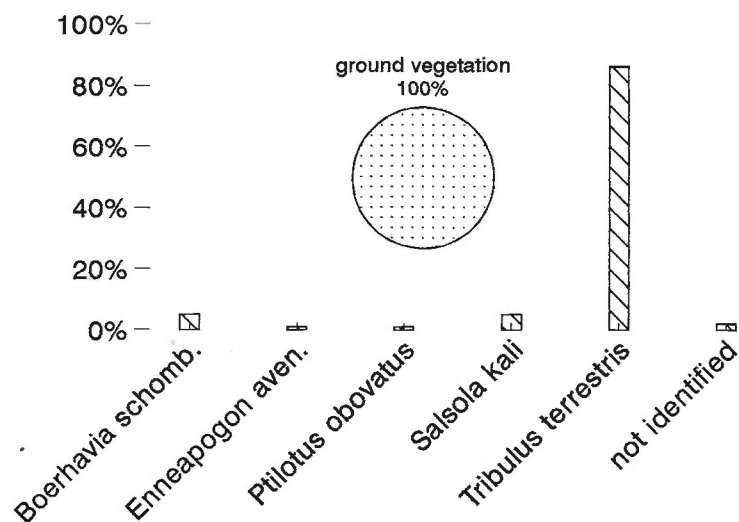


Fig. A2.6: bushland, 19.04.88, K 21

Fig. A2.4-6: quantitative food selection from random samples

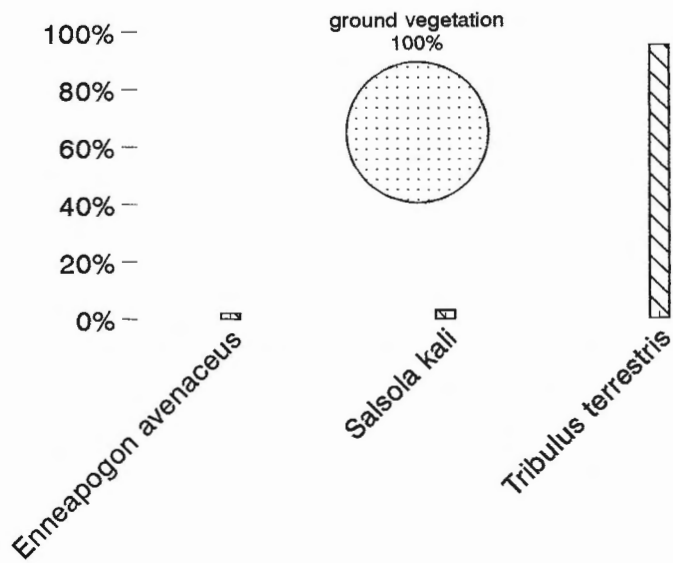


Fig. A2.7: bushland, 20.04.88, G 1

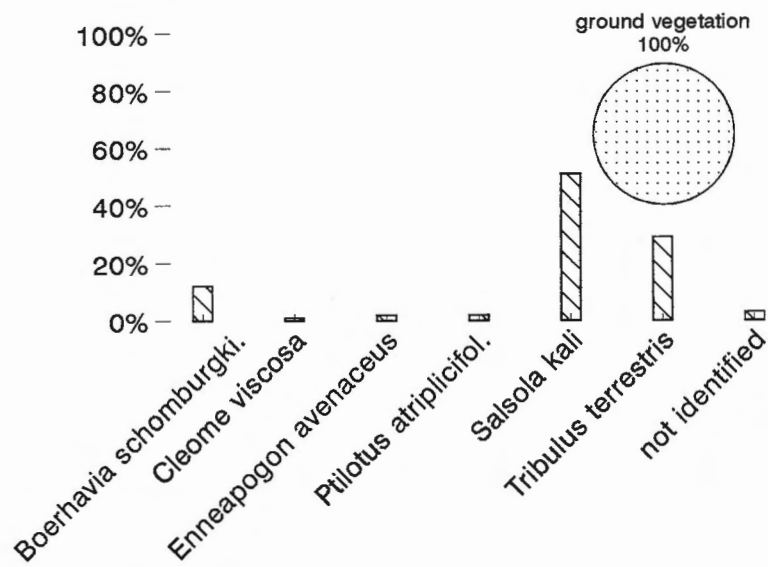


Fig. A2.8: bushland, 07.05.88, K 21

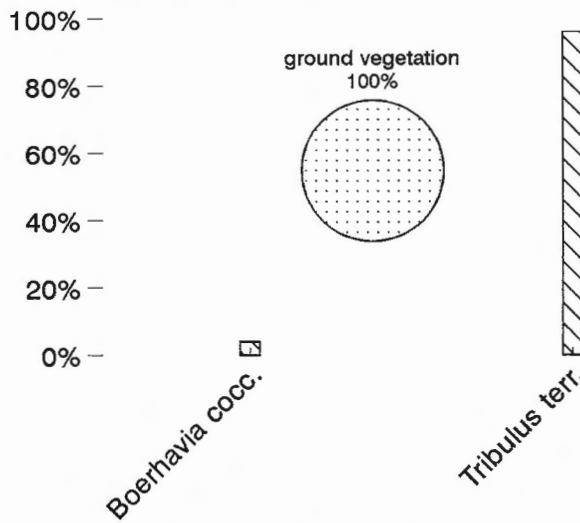


Fig. A2.9: bushland, 07.05.88, BC 11

Fig. A2.7-9: quantitative food selection from random samples



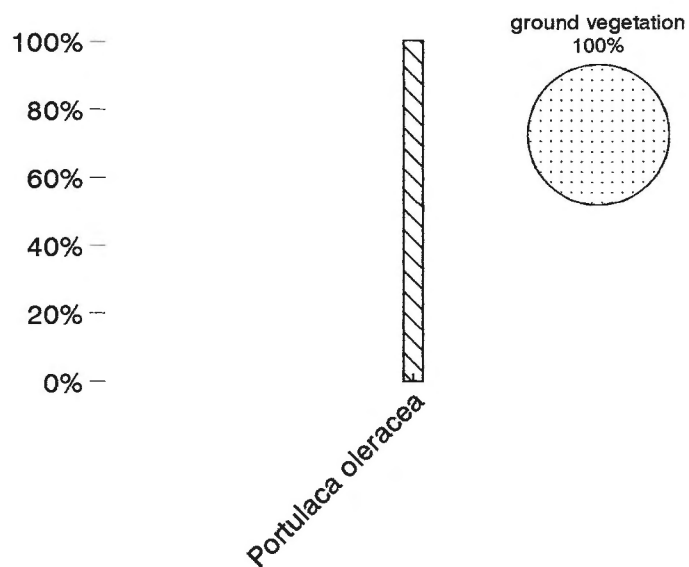


Fig. A2.10: bushland, 10.06.88, H 6

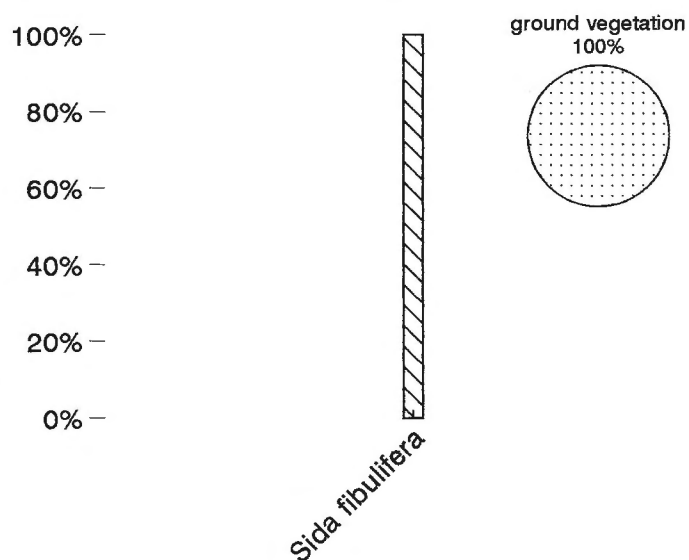


Fig. A2.11: bushland, 22.06.88, BB 9

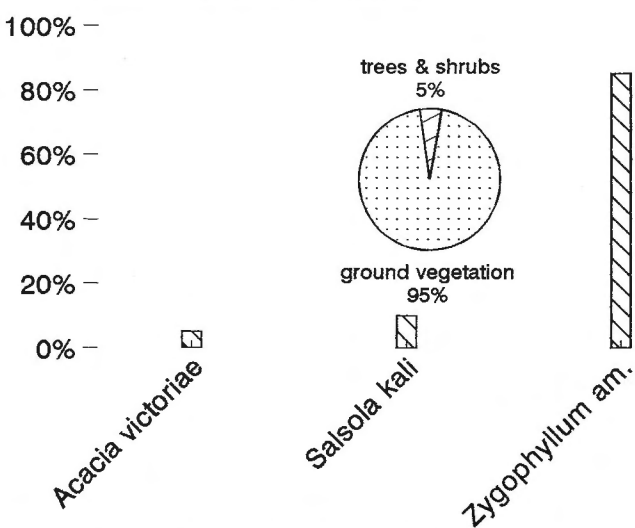


Fig. A2.12: bushland, 30.09.88, G 16

Fig. A2.10-12: quantitative food selection from random samples

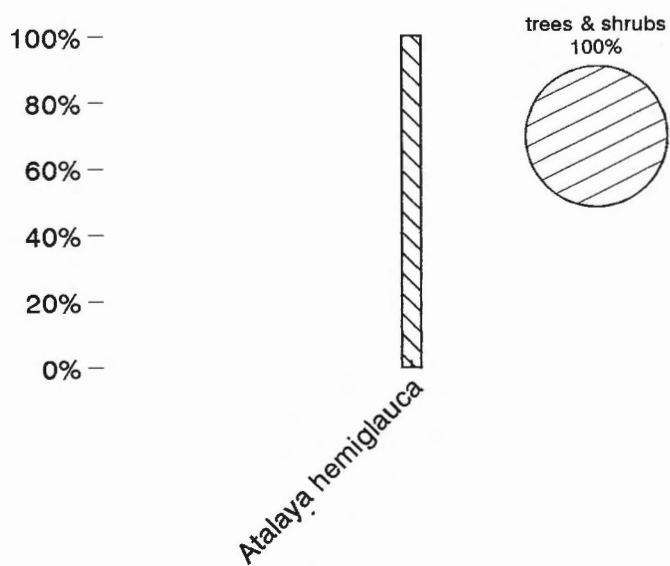


Fig. A2.13: bushland, 06.10.88, I 18

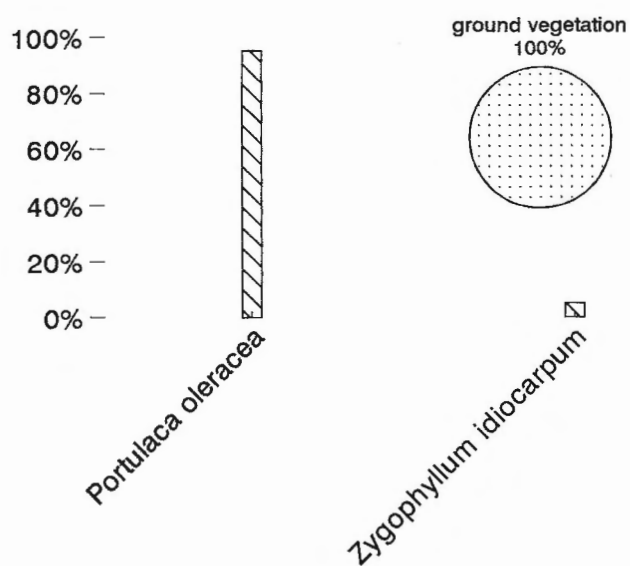


Fig. A2.14: bushland, 23.10.88, F 2

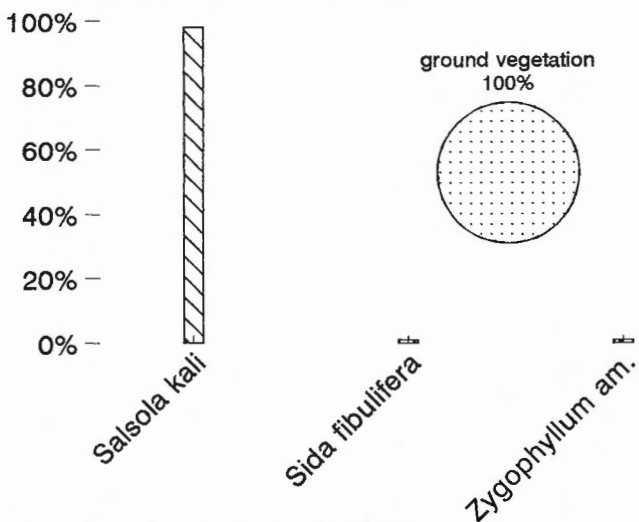


Fig. A2.15: bushland, 11.11.88, H 16

Fig. A2.13-15: quantitative food selection from random samples

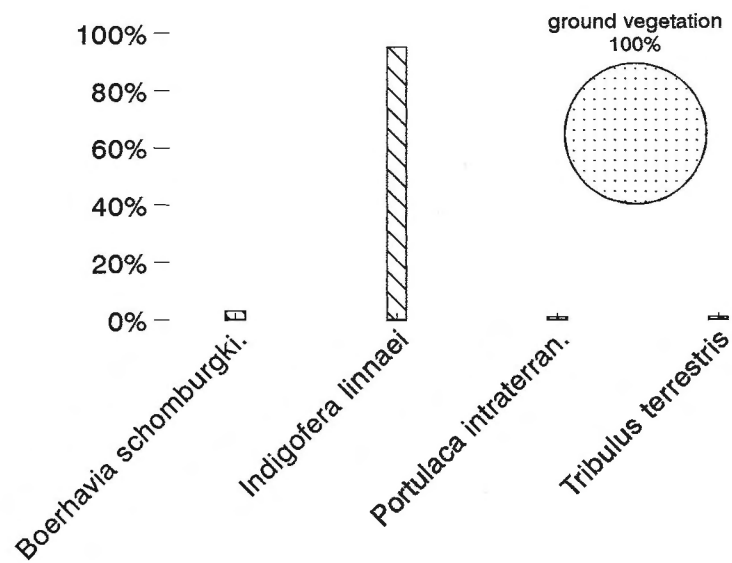


Fig. A2.16: bushland, 16.12.88, I 14

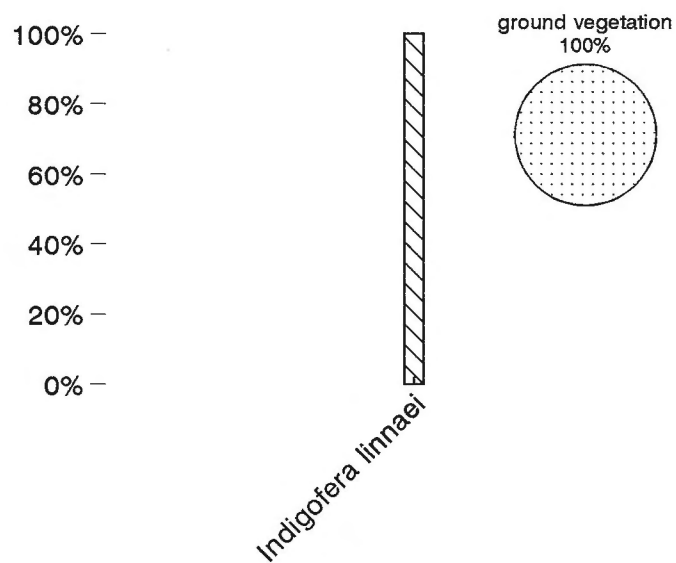


Fig. A2.17: bushland, 18.12.88, J 4

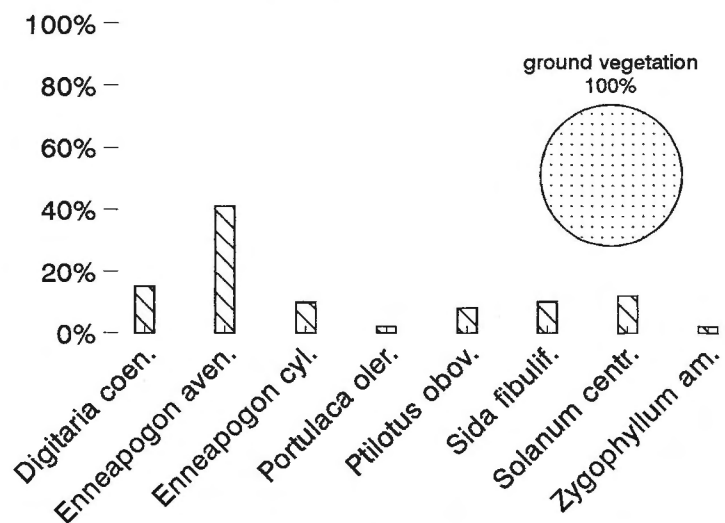


Fig. A2.18: bushland, 19.12.88, J 5

Fig. A2.16-18: quantitative food selection from random samples

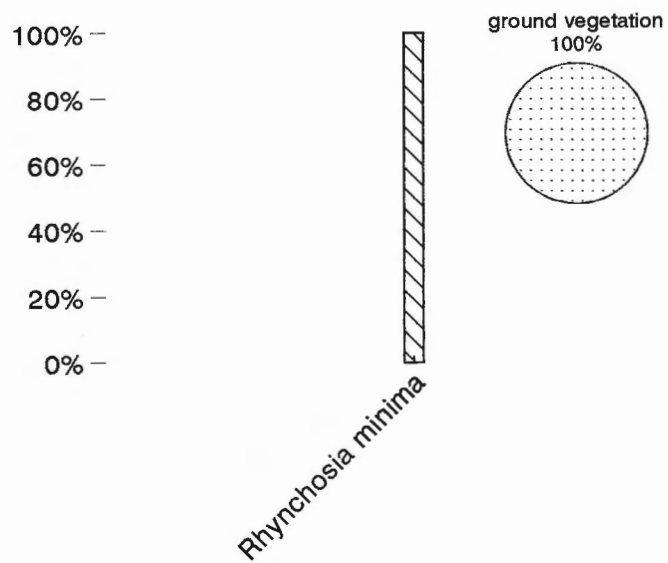


Fig. A2.19: bushland, 10.01.89, G 19

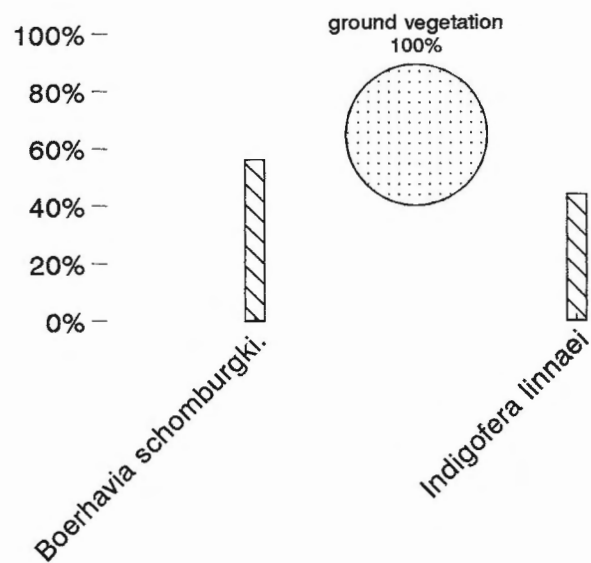


Fig. A2.20: bushland, 11.01.89, G 3

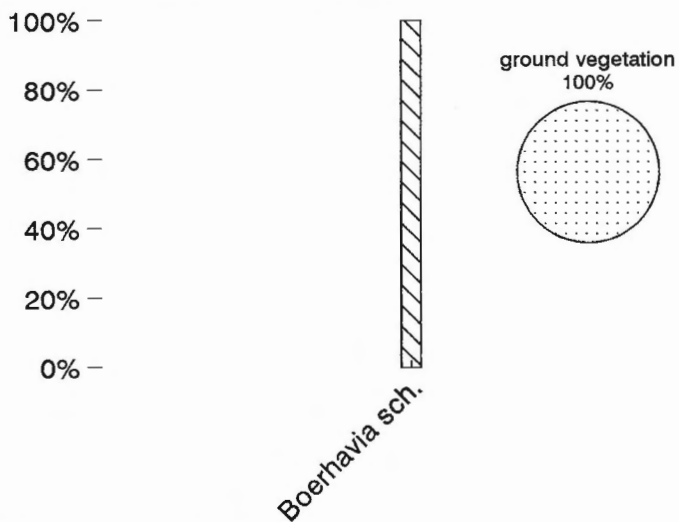


Fig. A2.21: bushland, 03.03.89, G 12

Fig. A2.19-21: quantitative food selection from random samples

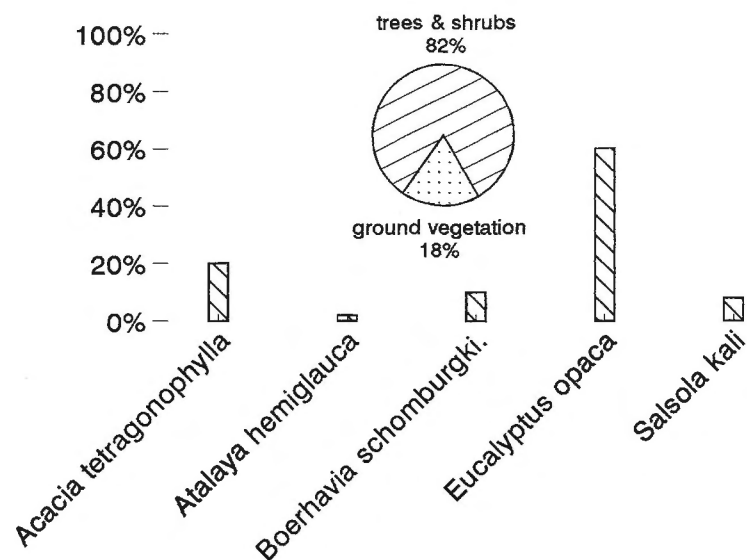


Fig. A2.22: bushland, 07.03.89, H 14

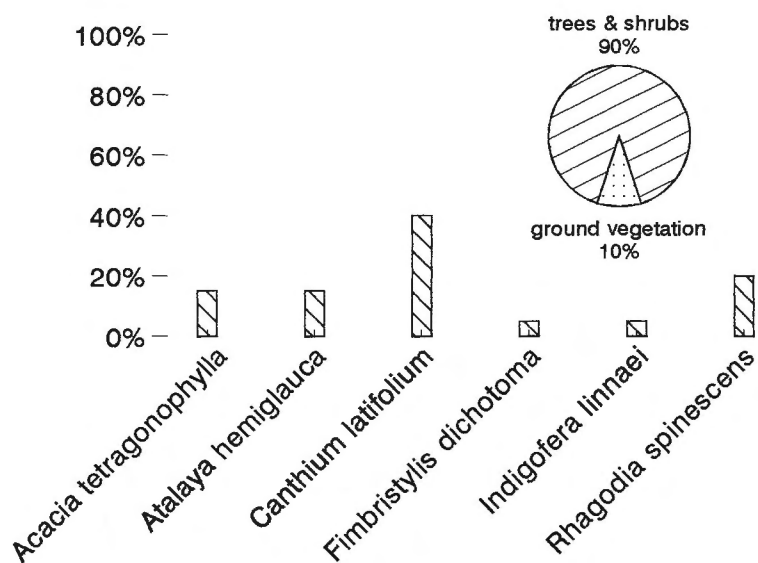


Fig. A2.23: bushland, 22.03.89, F 15

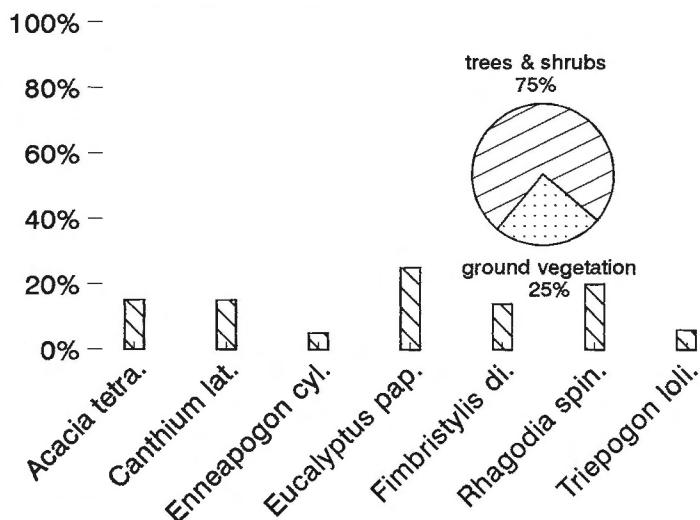


Fig. A2.24: bushland, 22.03.89, F 15

Fig. A2.22-24: quantitative food selection from random samples

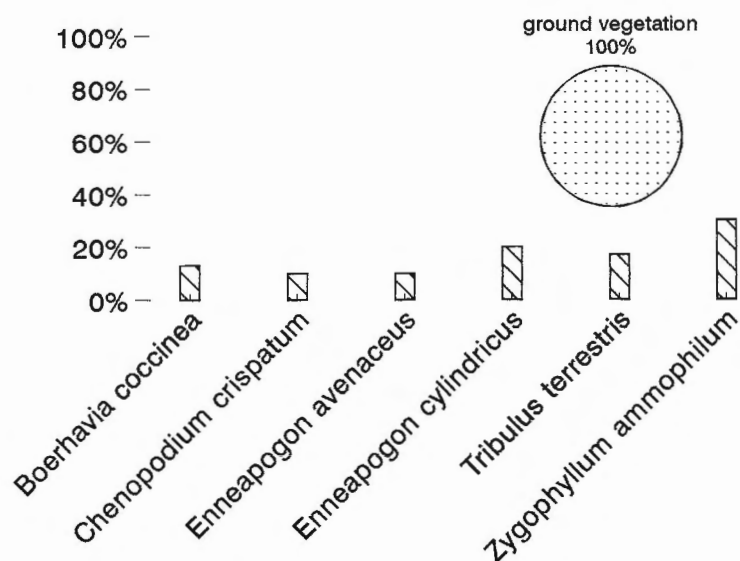


Fig. A2.25: bushland, 15.04.89, J 3

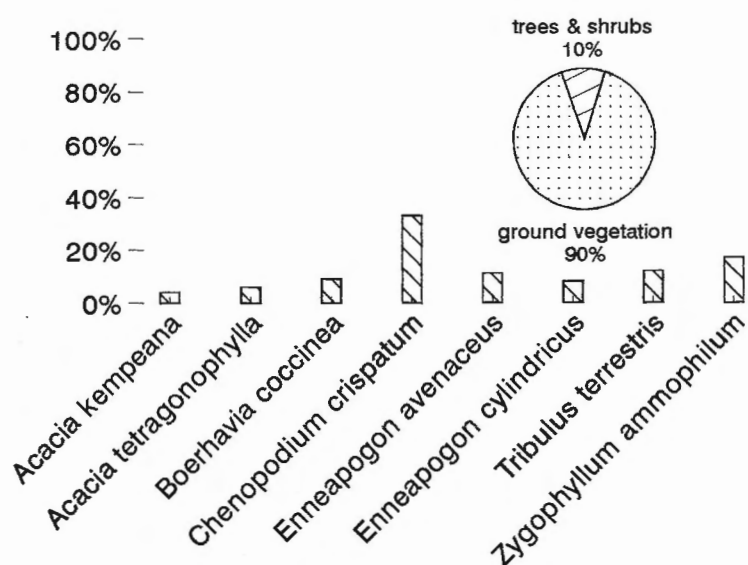


Fig. A2.26: bushland, 15.04.89, J 3

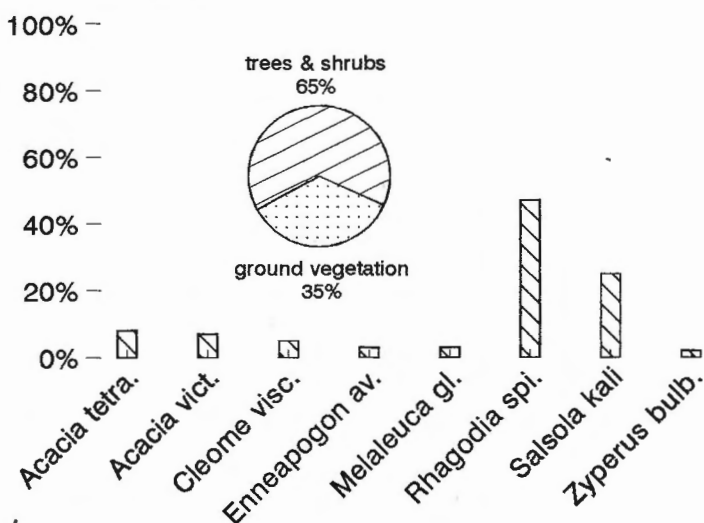


Fig. A2.27: bushland, 16.04.89, H 2

Fig. A2.25-27: quantitative food selection from random samples

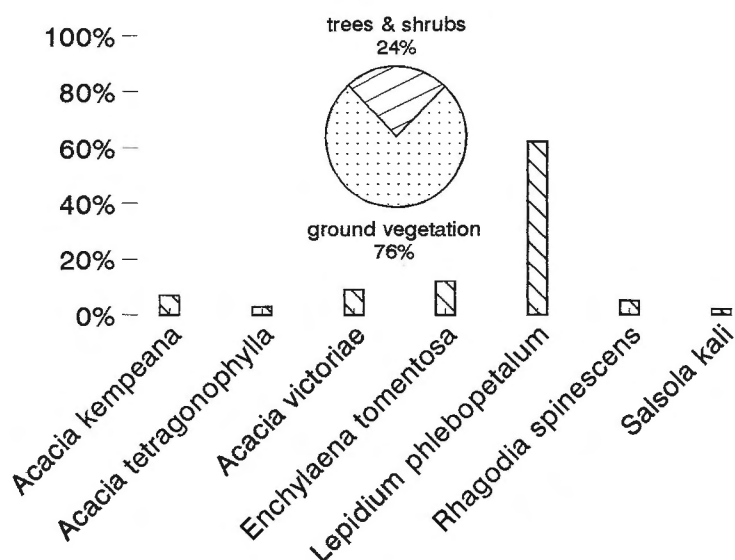


Fig. A2.28: bushland, 07.07.89, F 3

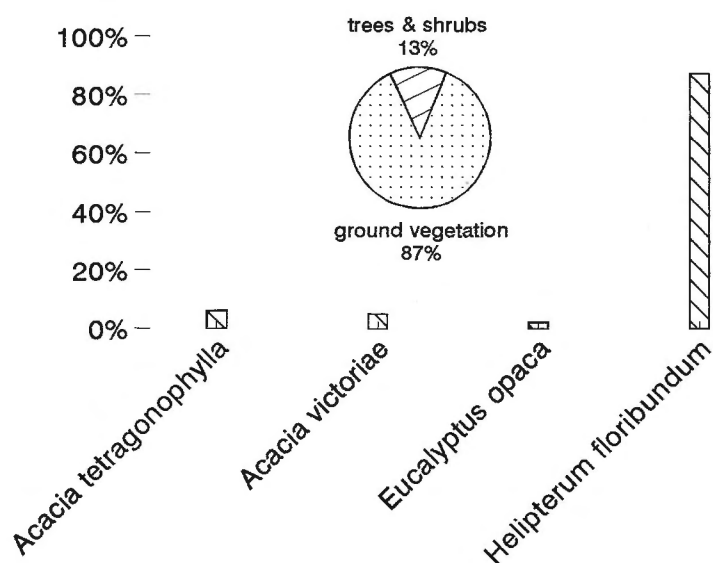


Fig. A2.29: bushland, 13.07.89, J 2

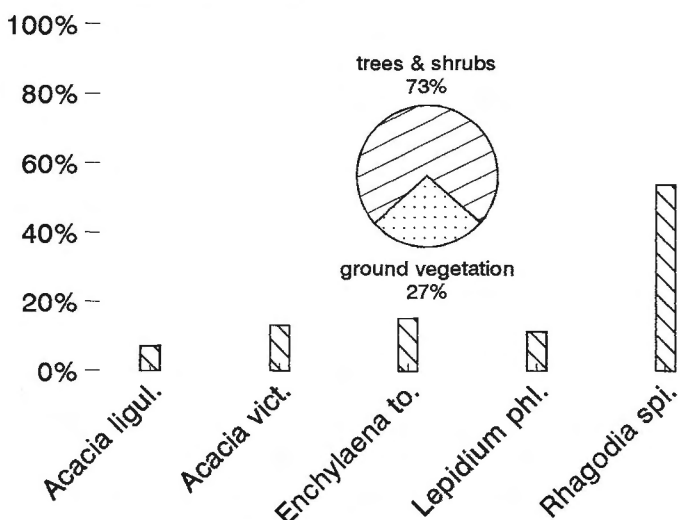


Fig. A2.30: bushland, 16.08.89, J 19

Fig. A2.28-30: quantitative food selection from random samples

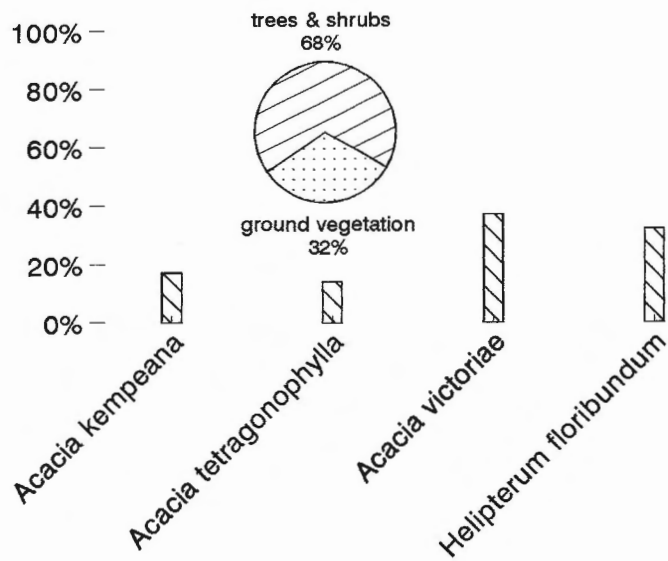


Fig. A2.31: bushland, 04.09.89, J 4

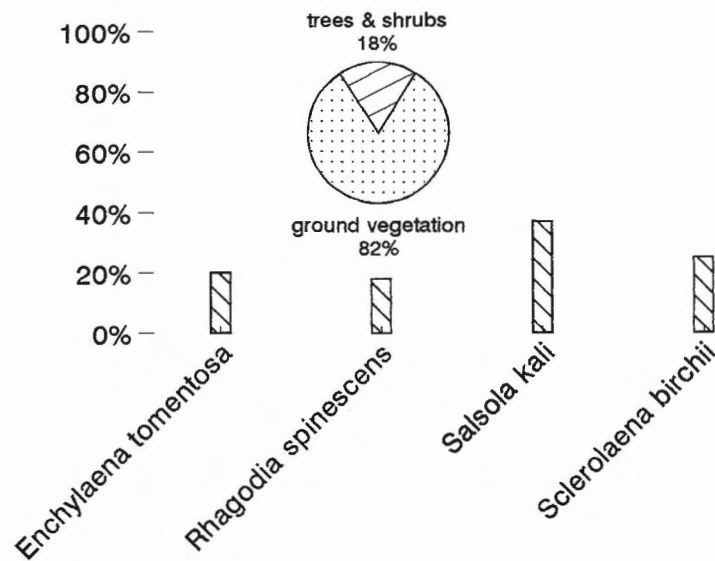


Fig. A2.32: bushland, 06.09.89, H 5

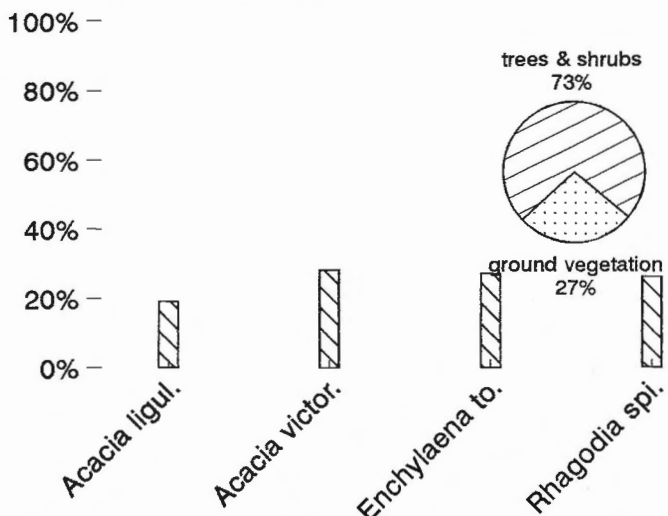


Fig. A2.33: bushland, 15.09.89, G 20

Fig. A2.31-33: quantitative food selection from random samples



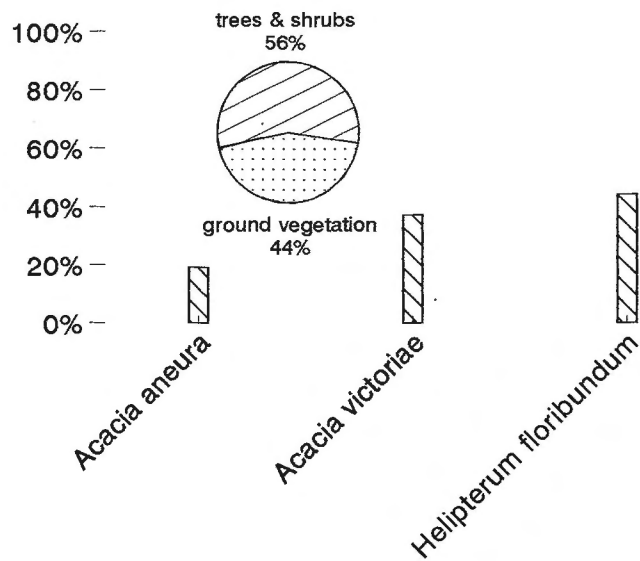


Fig. A2.34: bushland, 15.09.89, I 16

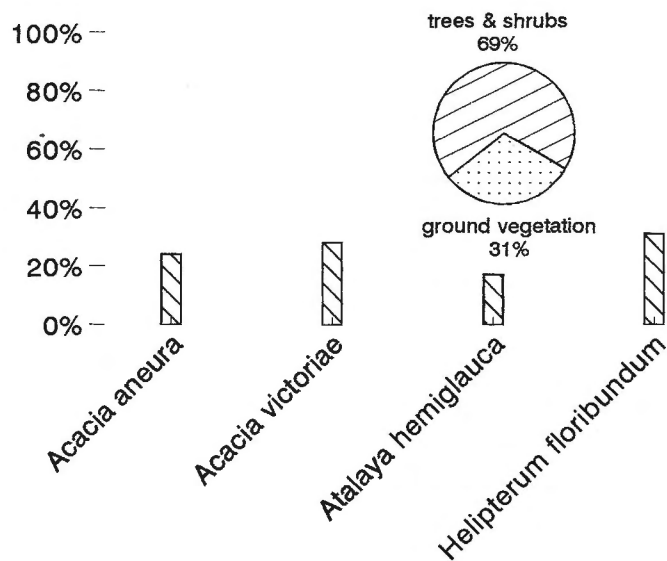


Fig. A2.35: bushland, 15.09.89, I 16

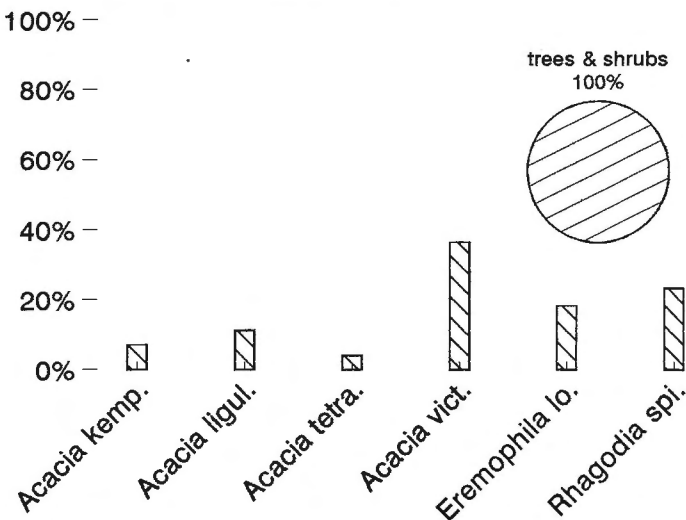


Fig. A2.36: bushland, 16.09.89, F 15

Fig. A2.34-36: quantitative food selection from random samples

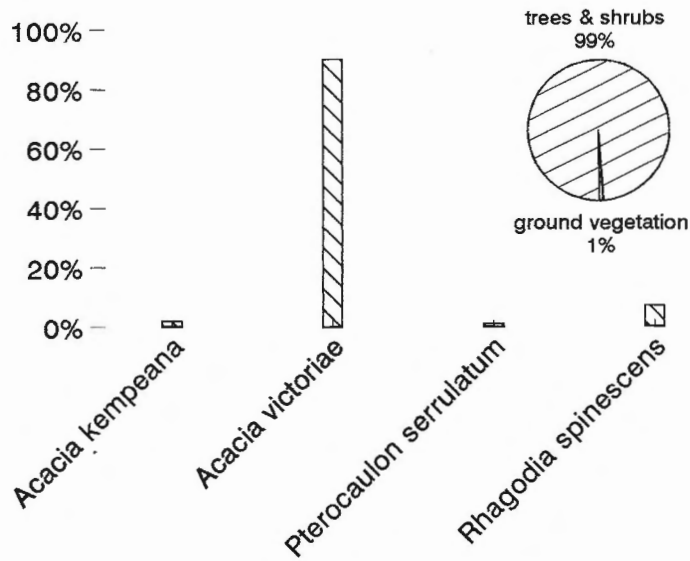


Fig. A2.37: bushland, 16.09.89, F 16

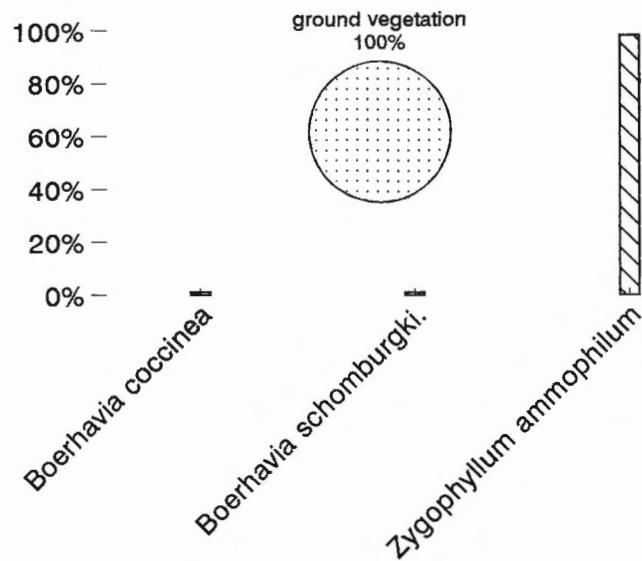


Fig. A2.38: open plain, 25.05.88, J 20

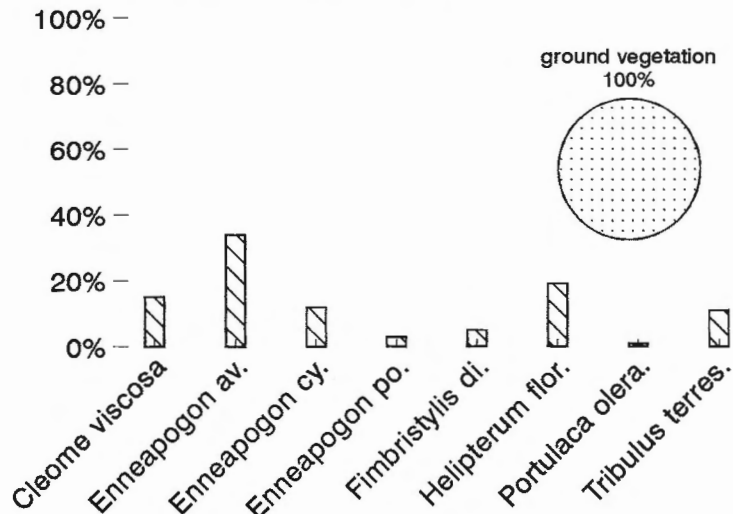


Fig. A2.39: open plain, 26.05.88, BE 2

Fig. A2.37-39: quantitative food selection from random samples

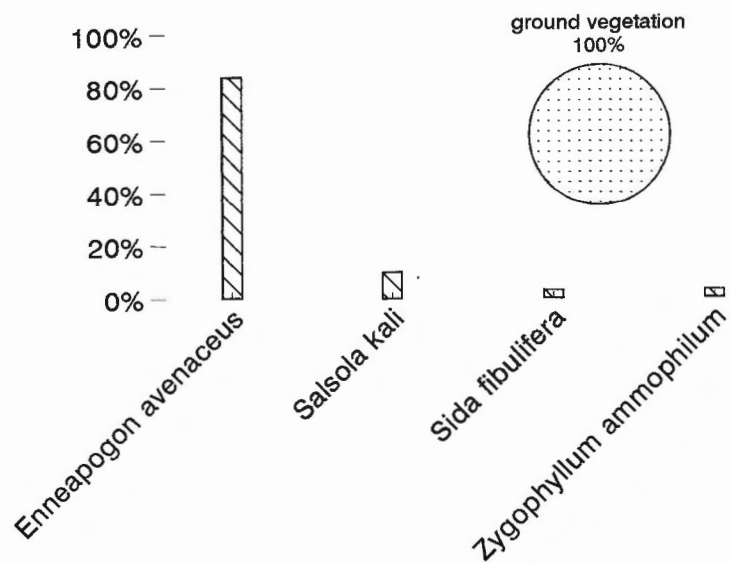


Fig. A2.40: open plain, 16.12.88, H 18

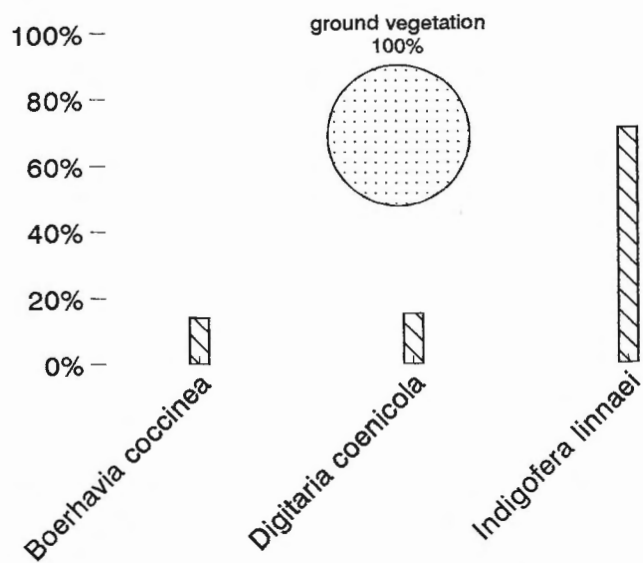


Fig. A2.41: open plain, 19.12.88, J 4

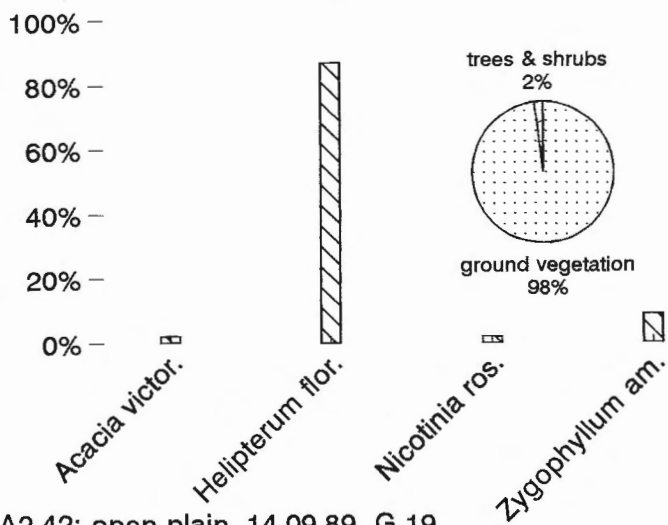


Fig. A2.42: open plain, 14.09.89, G 19

Fig. A2.40-42: quantitative food selection from random samples

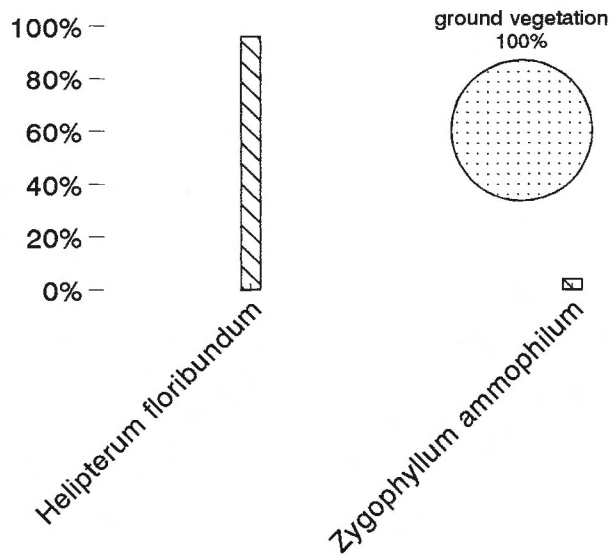


Fig. A2.43: open plain, 14.09.89, G 19

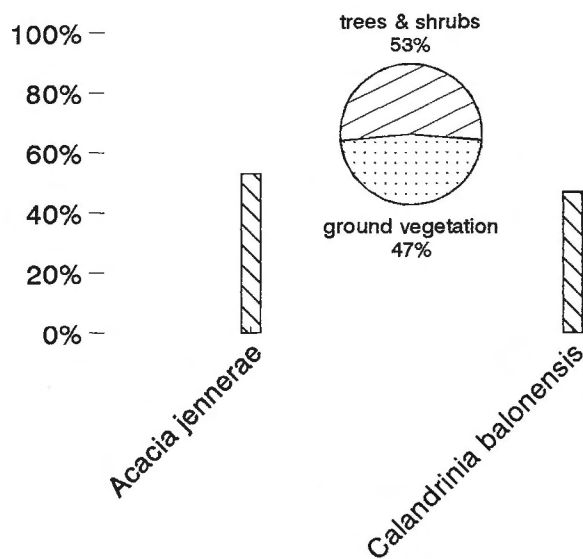


Fig. A2.44: sandplain/dunes, 09.09.87, B 13

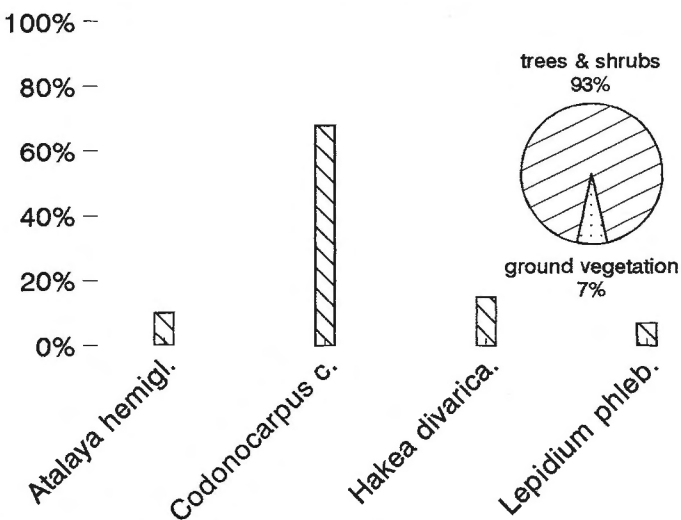


Fig. A2.45: sandplain/dunes, 07.03.88, L 12

Fig. A2.43-45: quantitative food selection from random samples

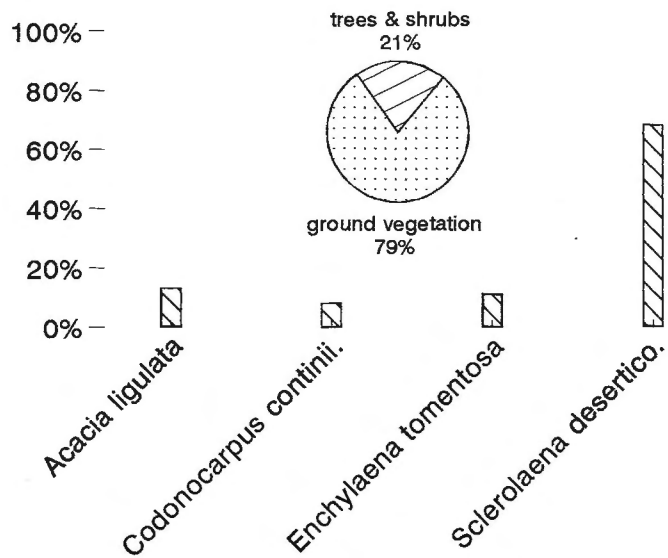


Fig. A2.46: sandplain/dunes, 07.03.88, D 5

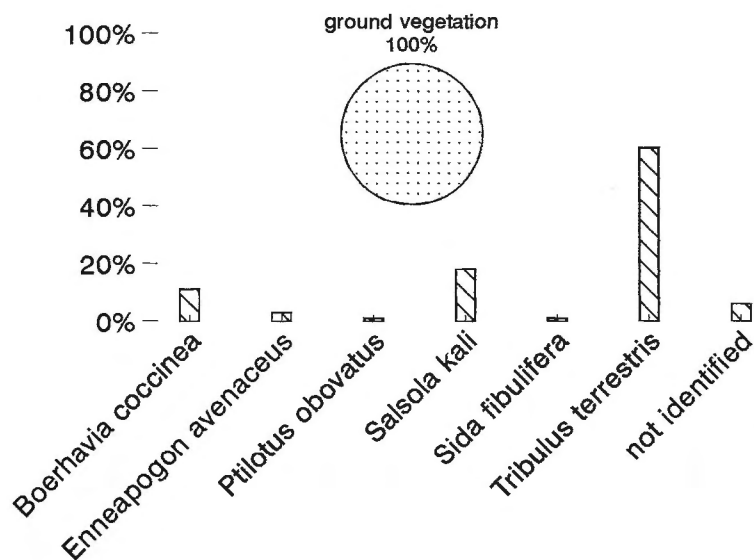


Fig. A2.47: sandplain/dunes, 19.04.88, E 7

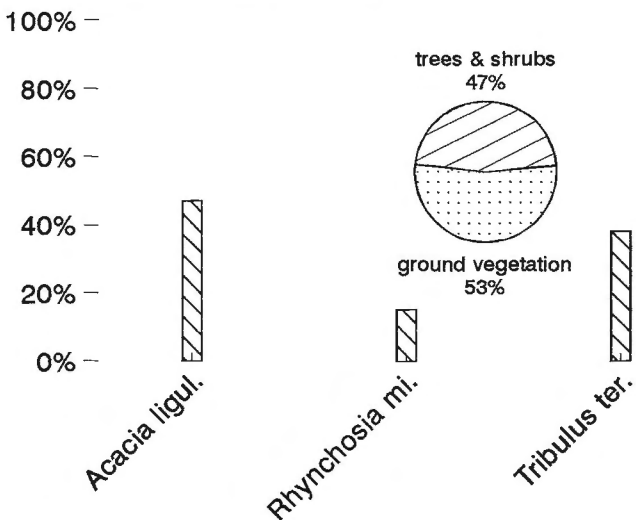


Fig. A2.48: sandplain/dunes, 20.05.88, BI 10

Fig. A2.46-48: quantitative food selection from random samples

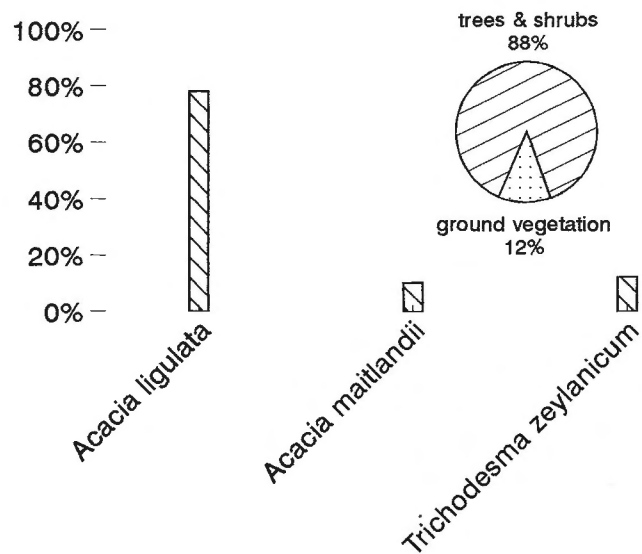


Fig. A2.49: sandplain/dunes, 19.06.88, N 7

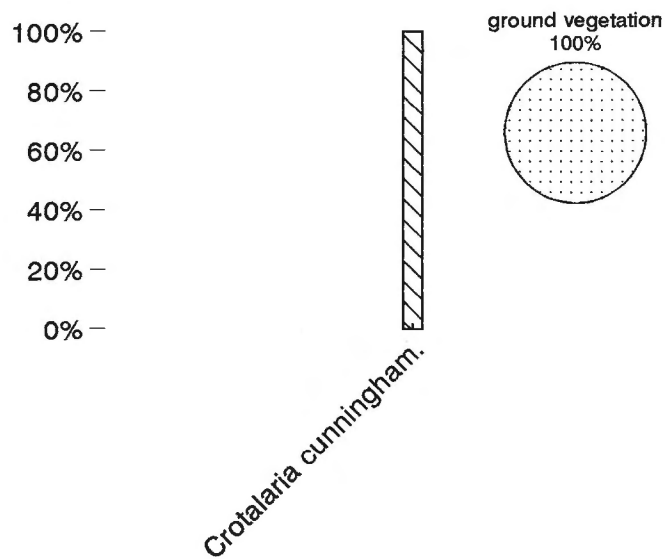


Fig. A2.50: sandplain/dunes, 24.06.88, M 9

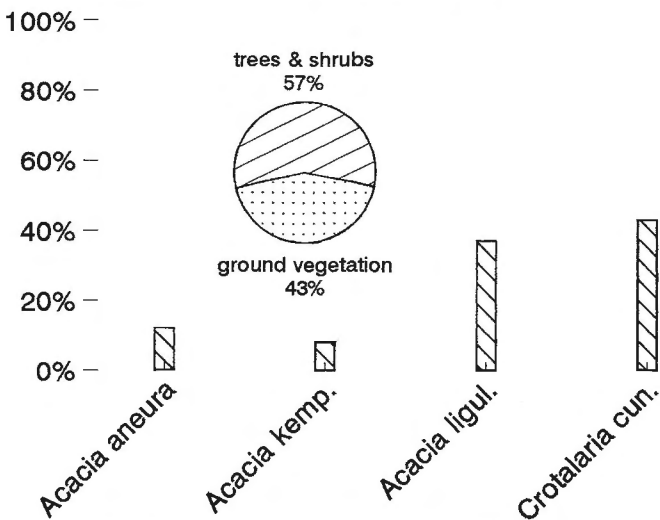


Fig. A2.51: sandplain/dunes, 26.06.88, M 9

Fig. A2.49-51: quantitative food selection from random samples

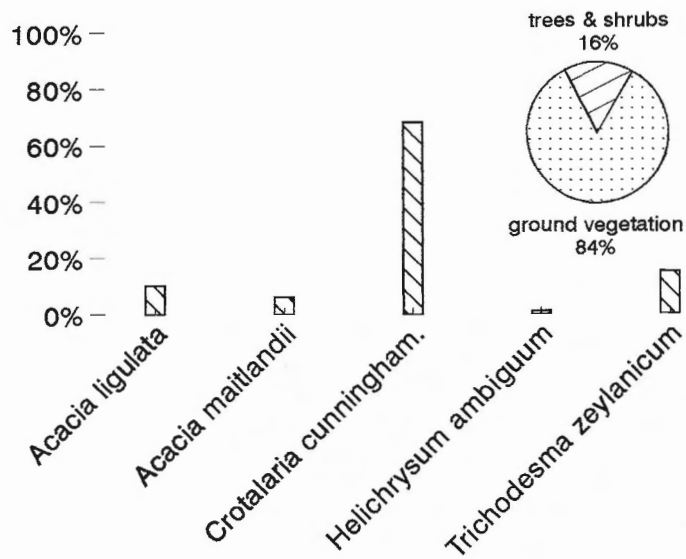


Fig. A2.52: sandplain/dunes, 15.07.88, M 9

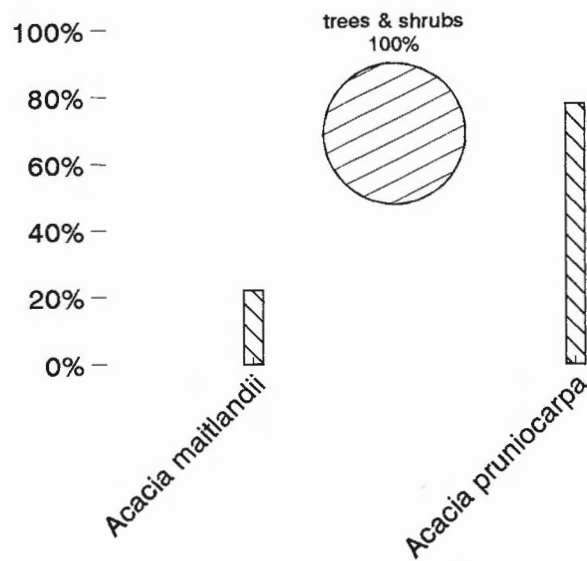


Fig. A2.53: sandplain/dunes, 19.08.88, N 8

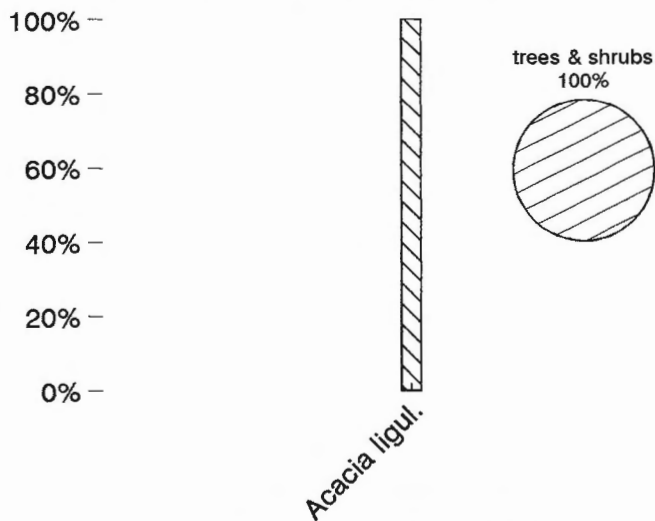


Fig. A2.54: sandplain/dunes, 07.09.88, N 20

Fig. A2.52-54: quantitative food selection from random samples

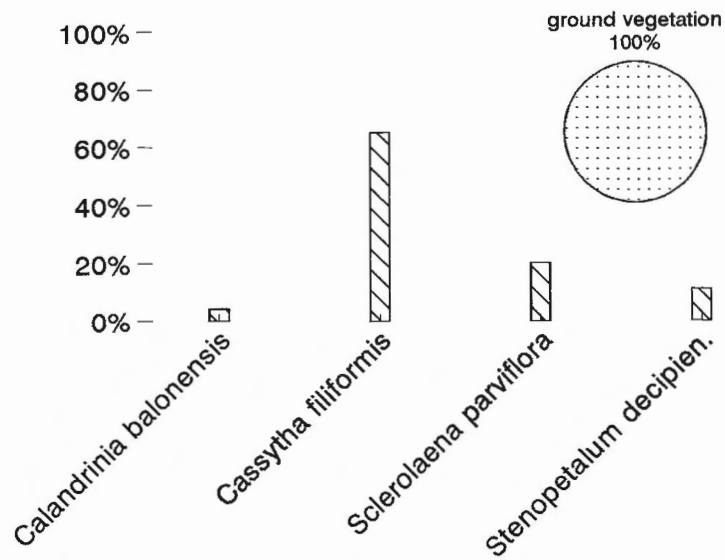


Fig. A2.55: sandplain/dunes, 09.09.88, F8/G7

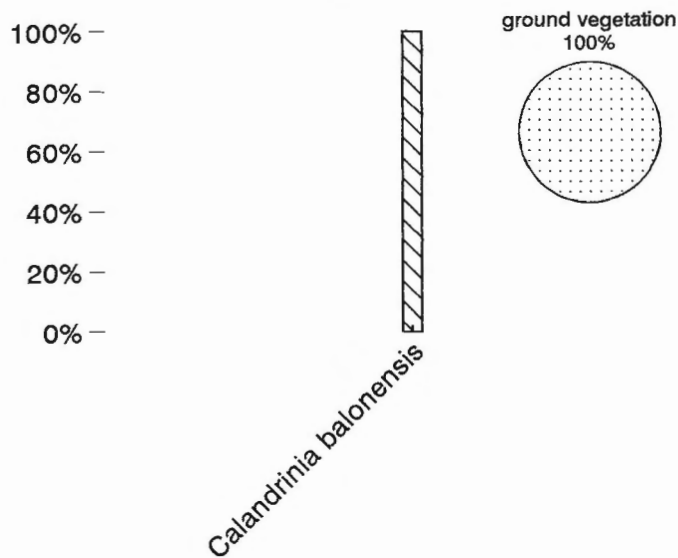


Fig. A2.56: sandplain/dunes, 09.09.88, D 8

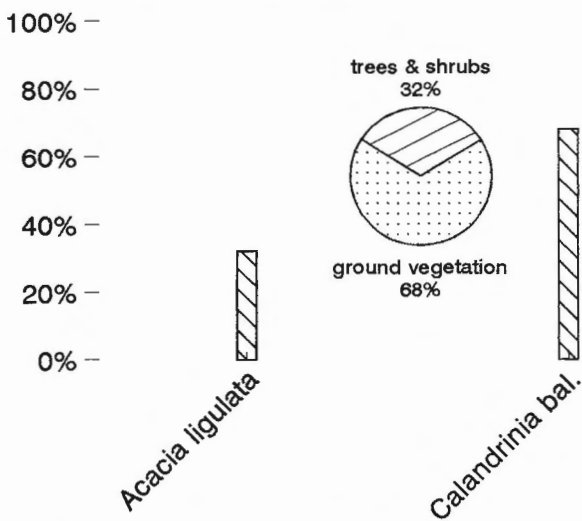


Fig. A2.57: sandplain/dunes, 16.09.88, L 17

Fig. A2.55-57: quantitative food selection from random samples



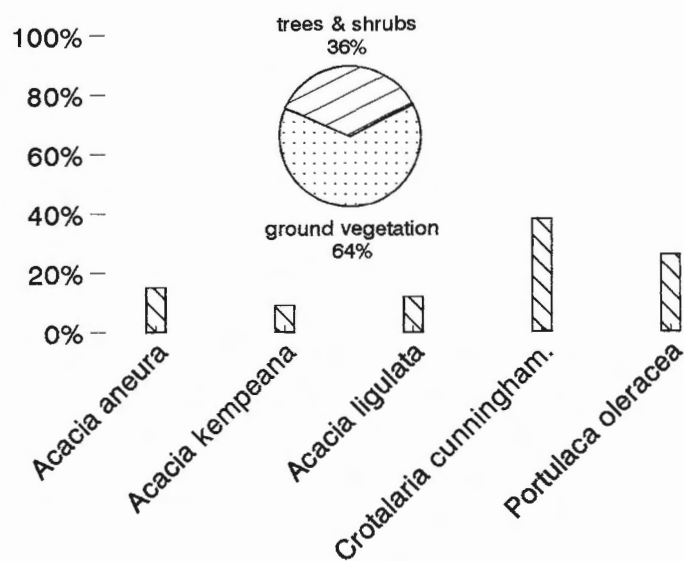


Fig. A2.58: sandplain/dunes, 18.09.88, N 9

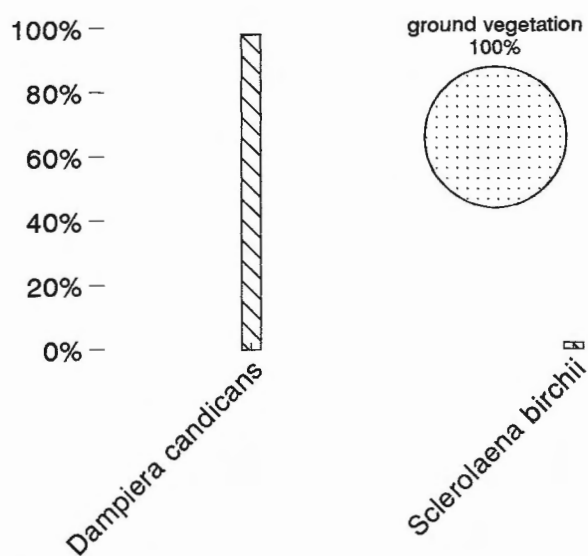


Fig. A2.59: sandplain/dunes, 14.11.88, C 7

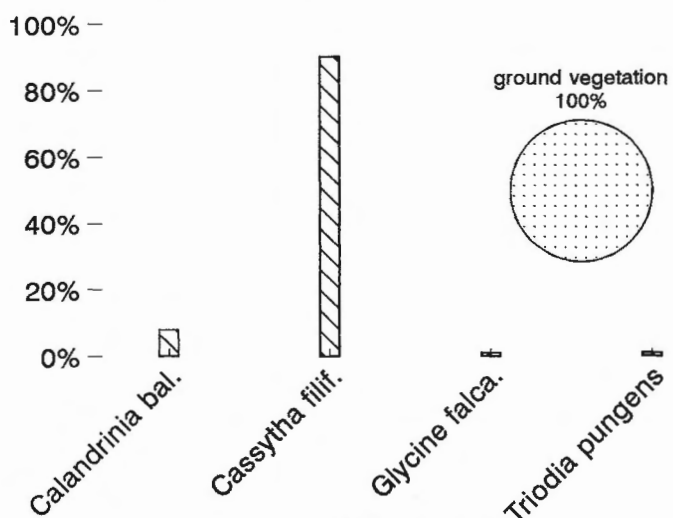


Fig. A2.60: sandplain/dunes, 01.02.89, E 12

Fig. A2.58-60: quantitative food selection from random samples

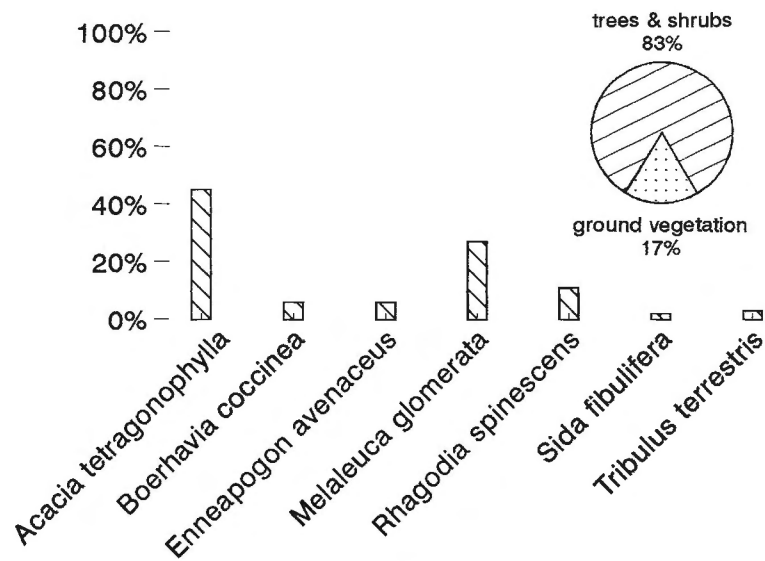


Fig. A2.61: sandplain/dunes, 22.03.89, E 15

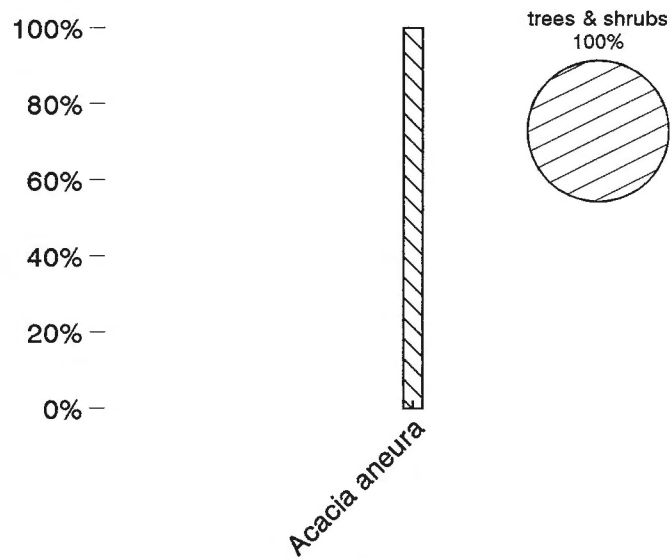


Fig. A2.62: sandplain/dunes, 22.03.89, E 15

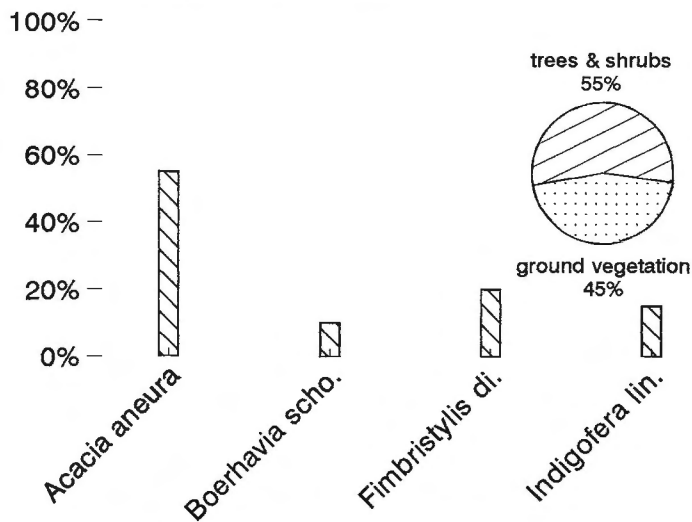


Fig. A2.63: sandplain/dunes, 22.03.89, E 14

Fig. A2.61-63: quantitative food selection from random samples

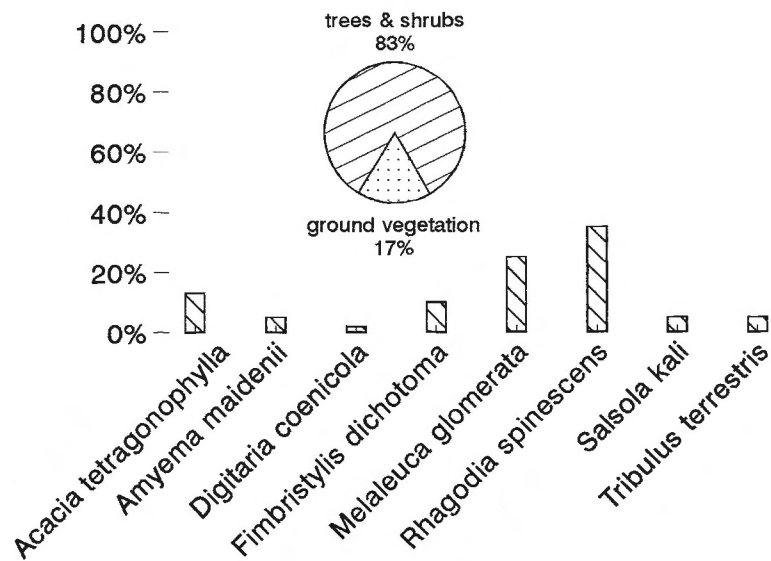


Fig. A2.64: sandplain/dunes, 22.03.89, E 14

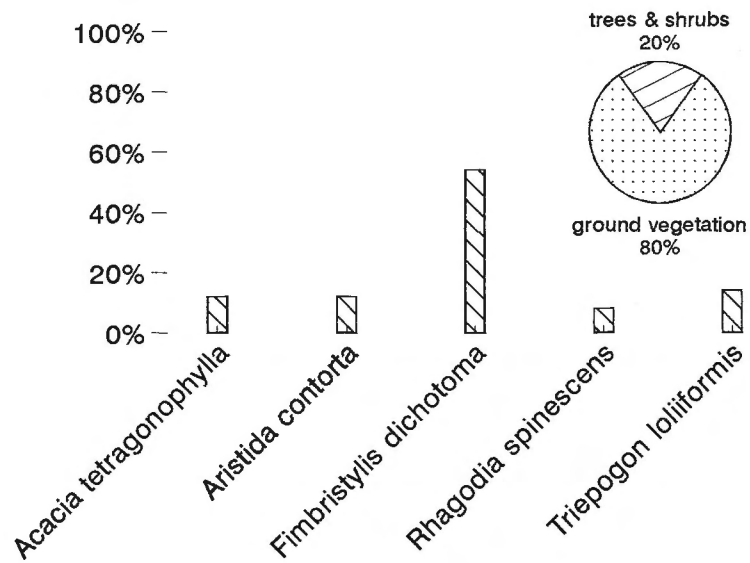


Fig. A2.65: sandplain/dunes, 22.03.89, E 14

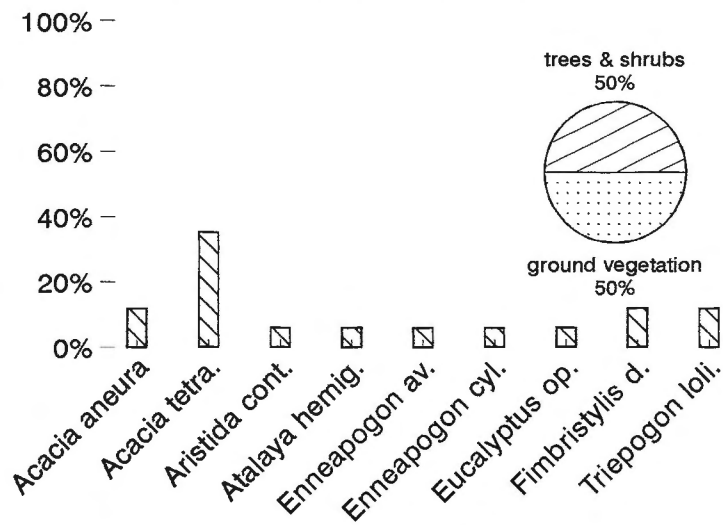


Fig. A2.66: sandplain/dunes, 22.03.89, E 14

Fig. A2.64-66: quantitative food selection from random samples

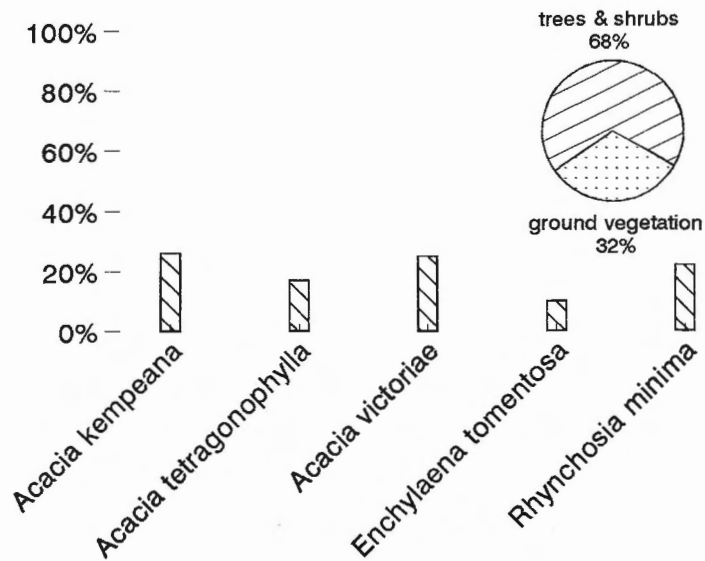


Fig. A2.67: sandplain/dunes, 29.04.89, E 4

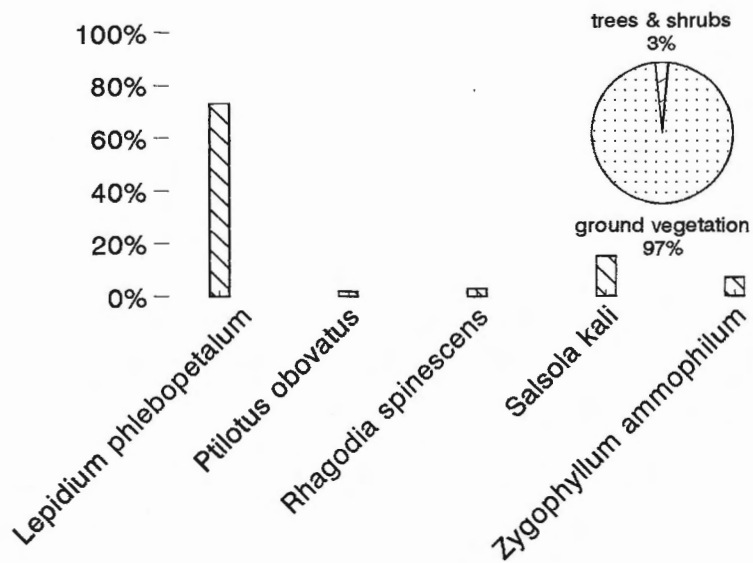


Fig. A2.68: sandplain/dunes, 29.04.89, E 4

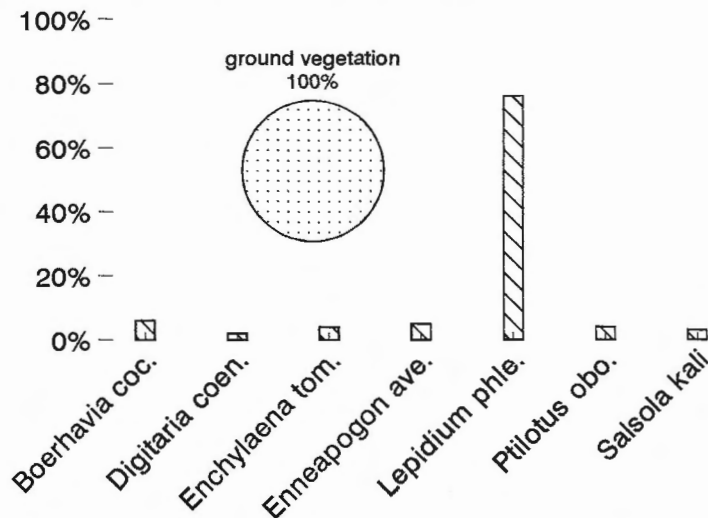


Fig. A2.69: sandplain/dunes, 29.04.89, E 4

Fig. A2.67-69: quantitative food selection from random samples

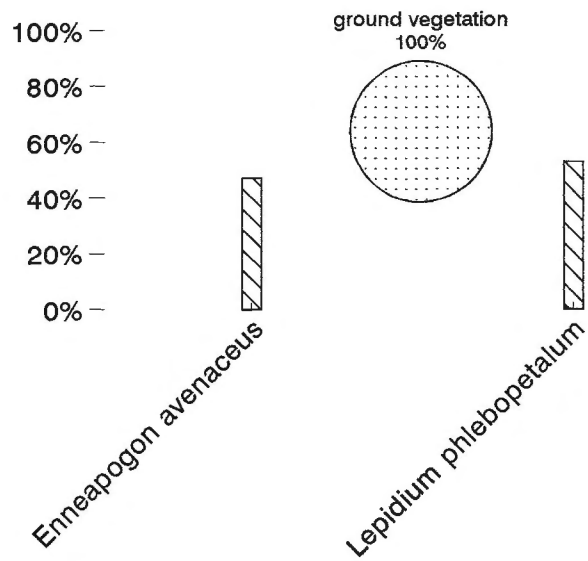


Fig. A2.70: sandplain/dunes, 29.04.89, E 5

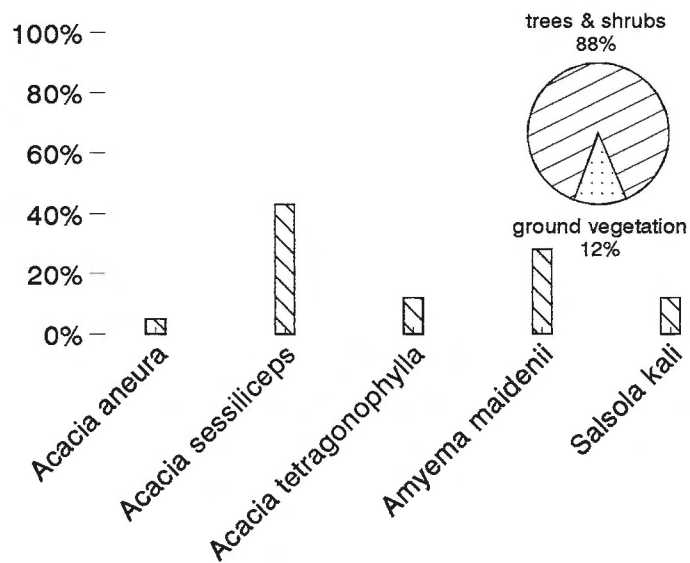


Fig. A2.71: sandplain/dunes, 29.04.89, E 4

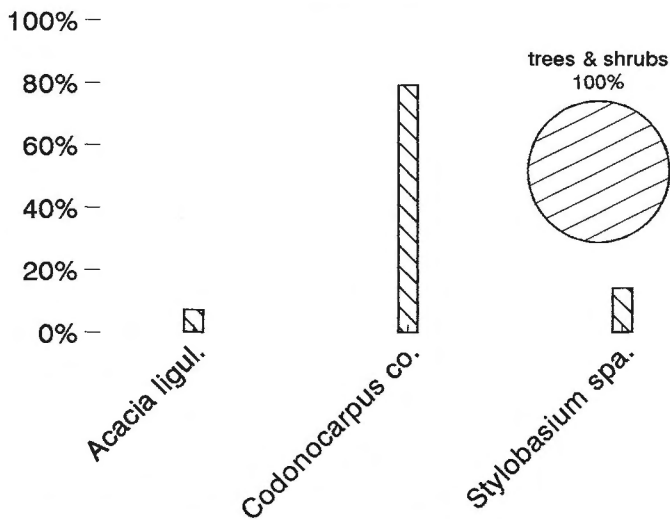


Fig. A2.72: sandplain/dunes, 02.05.89, D 3

Fig. A2.70-72: quantitative food selection from random samples

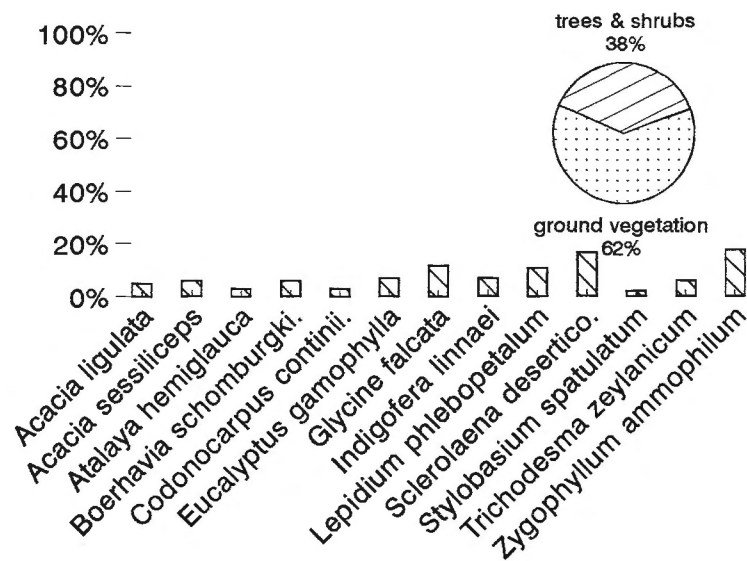


Fig. A2.73: sandplain/dunes, 02.05.89, D 3

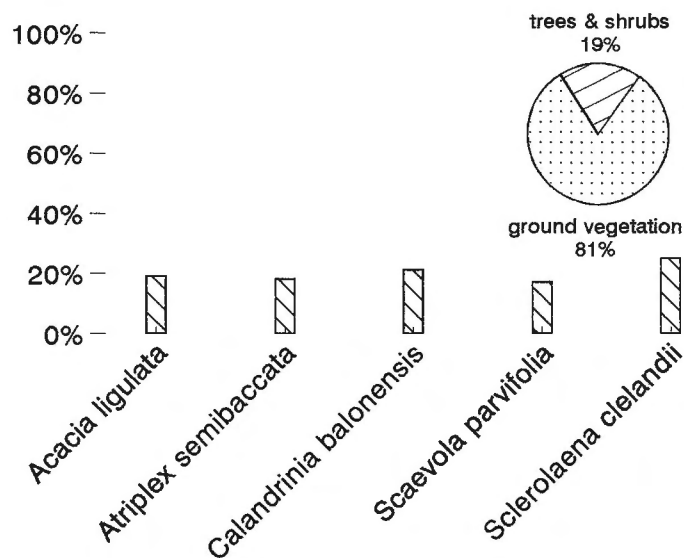


Fig. A2.74: sandplain/dunes, 13.06.89, C 7

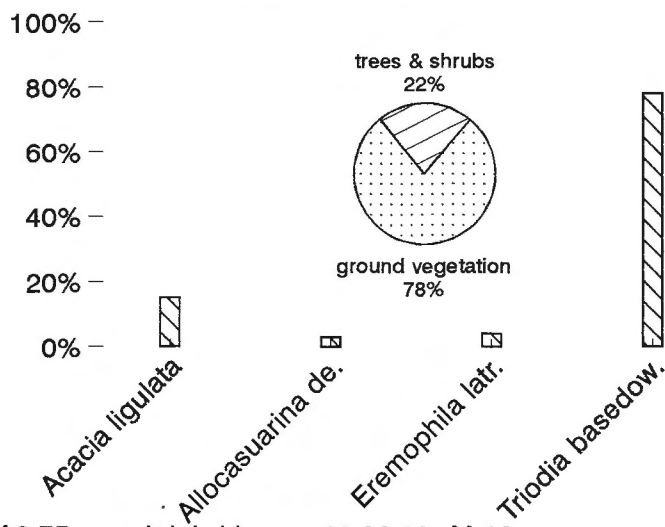


Fig. A2.75: sandplain/dunes, 12.06.89 M 18

Fig. A2.73-75: quantitative food selection from random samples

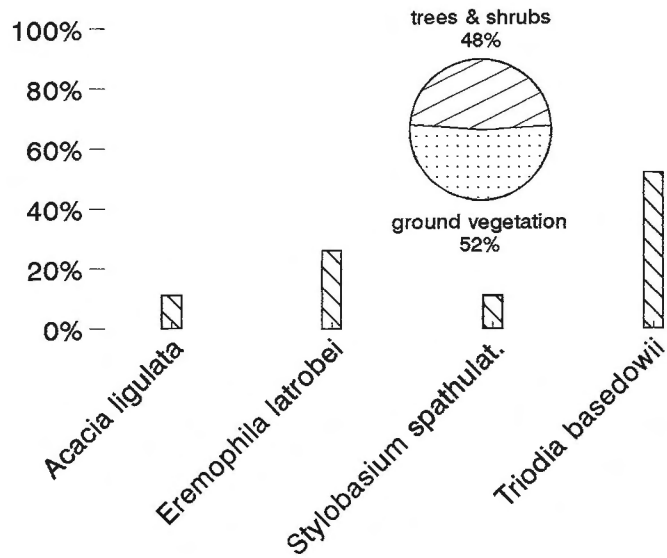


Fig. A2.76: sandplain/dunes, 14.06.89, M 18

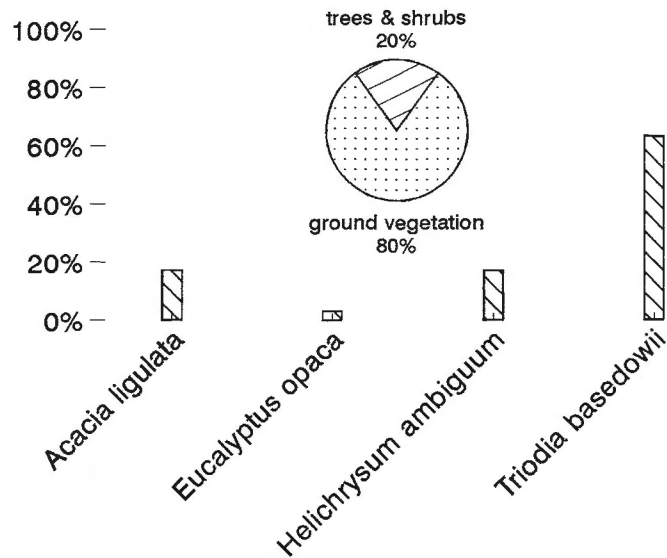


Fig. A2.77: sandplain/dunes, 09.07.89, N 21

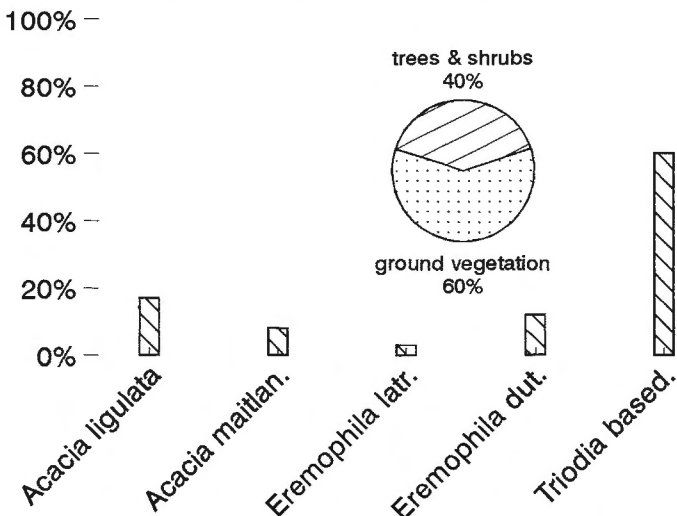


Fig. A2.78: sandplain/dunes, 09.07.89, N 20

Fig. A2.76-78: quantitative food selection from random samples

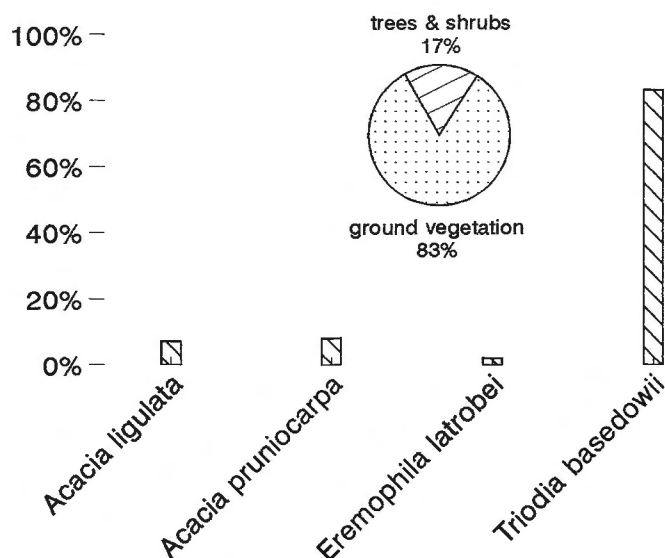


Fig. A2.79: sandplain/dunes, 10.07.89, N 21

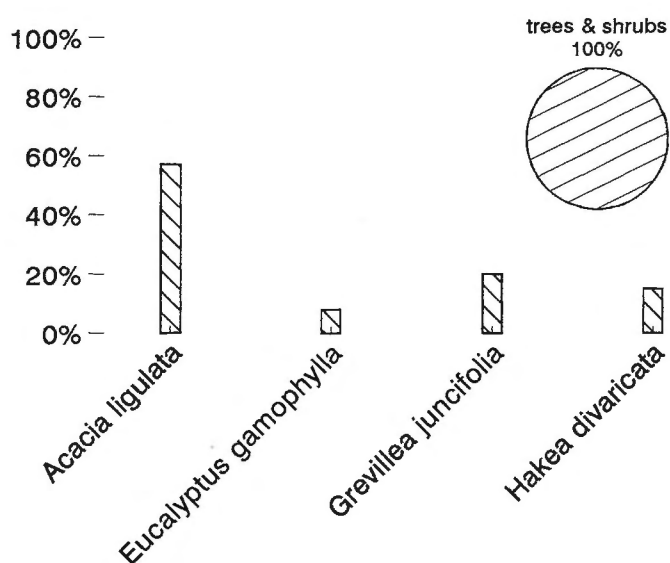


Fig. A2.80: sandplain/dunes, 07.08.89, E 11

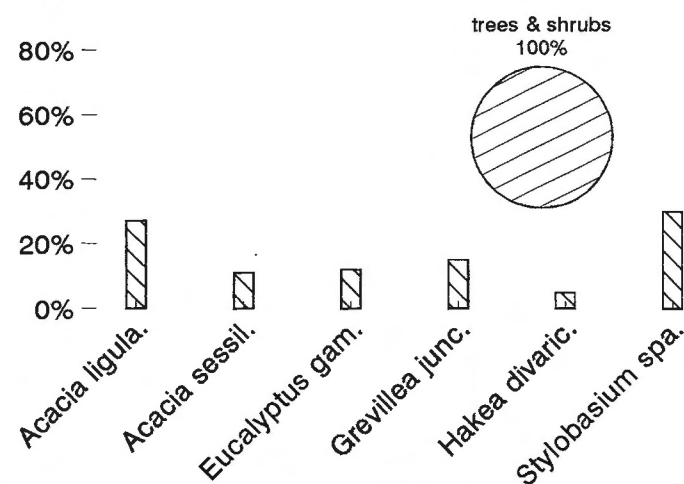


Fig. A2.81: sandplain/dunes, 07.08.89, E 11

Fig. A2.79-81: quantitative food selection from random samples



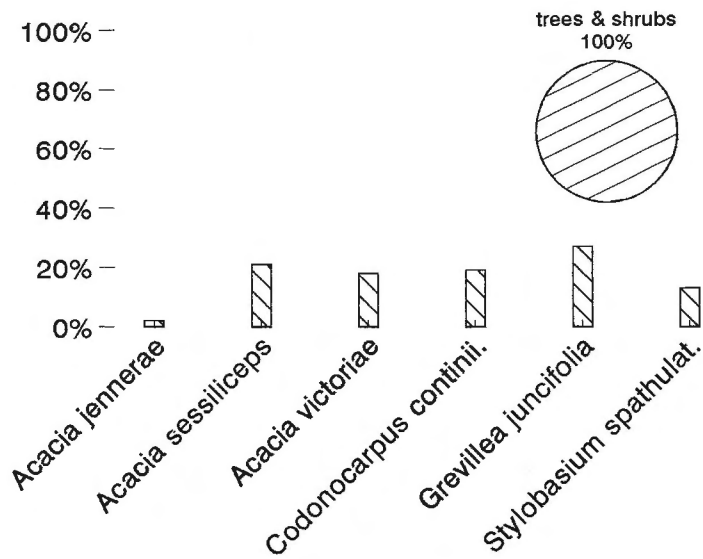


Fig. A2.82: sandplain/dunes, 06.09.89, D 21

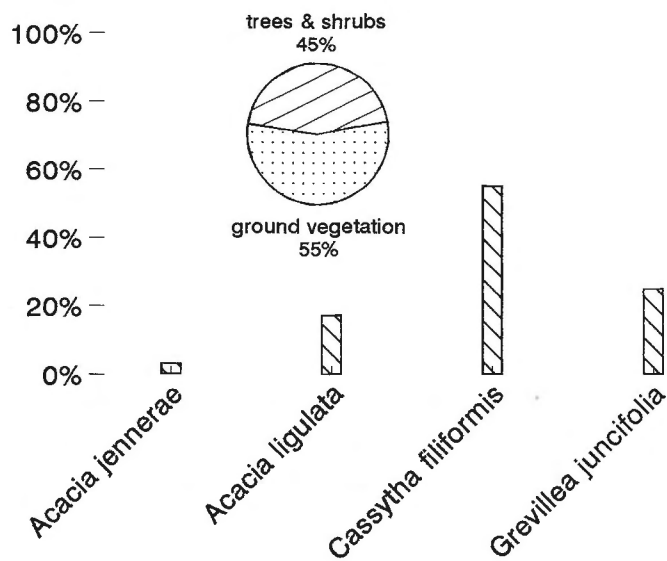


Fig. A2.83: sandplain/dunes, 07.09.89, D 21

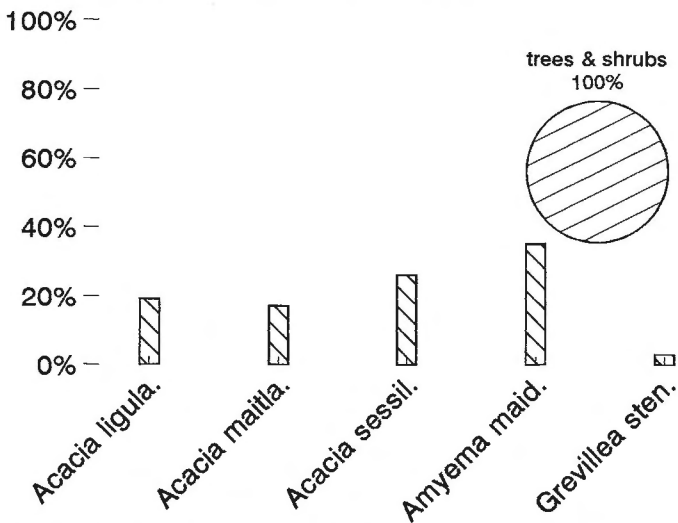


Fig. A2.84: sandplain/dunes, 10.09.89, E 4

Fig. A2.82-84: quantitative food selection from random samples

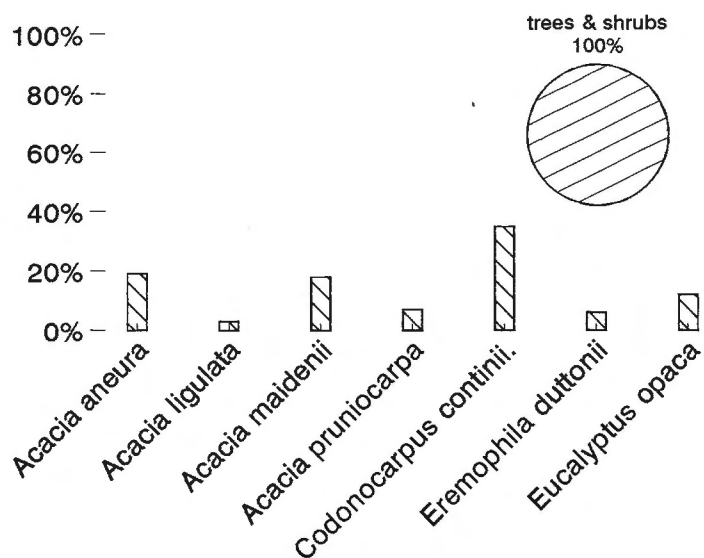


Fig. A2.85: sandplain/dunes, 14.09.89, L 19

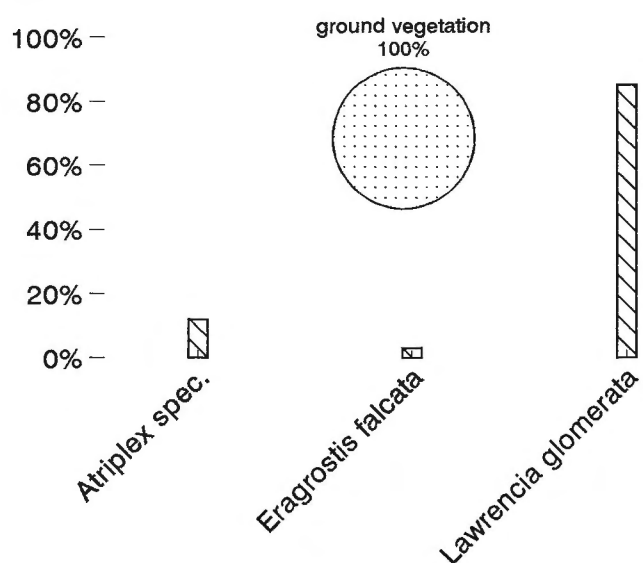


Fig. A2.86: saltmarsh, 07.09.87, E 5

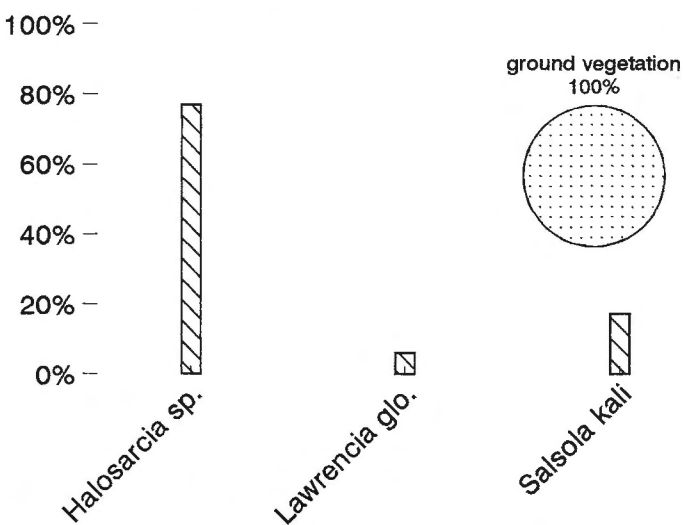


Fig. A2.87: saltmarsh, 07.03.88, D 4

Fig. A2.85-87: quantitative food selection from random samples

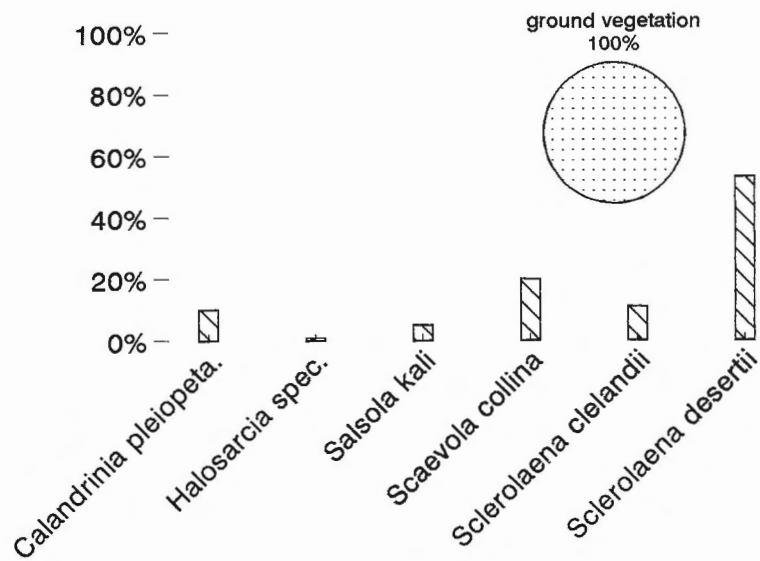


Fig. A2.88: saltmarsh, 07.05.88, E 10

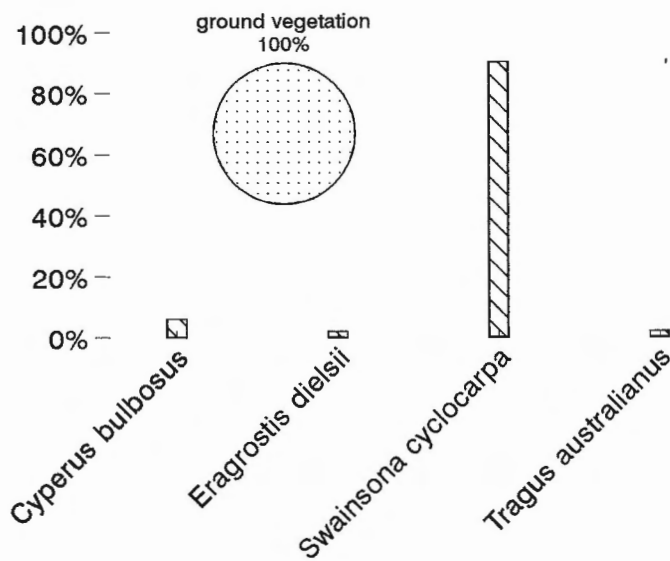


Fig. A2.89: saltmarsh, 27.05.88, C 20

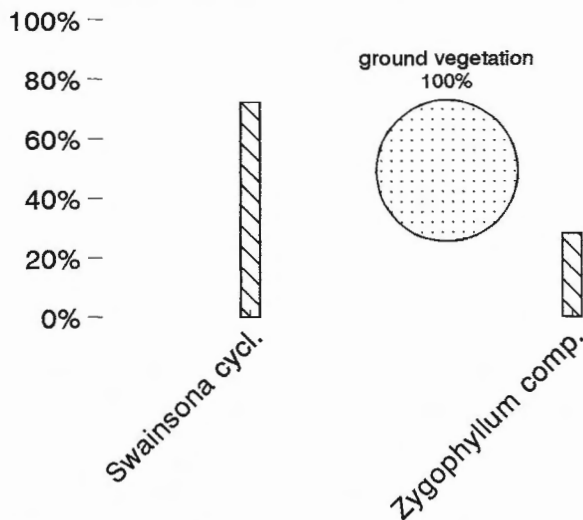


Fig. A2.90: saltmarsh, 30.05.88, C 20

Fig. A2.88-90: quantitative food selection from random samples

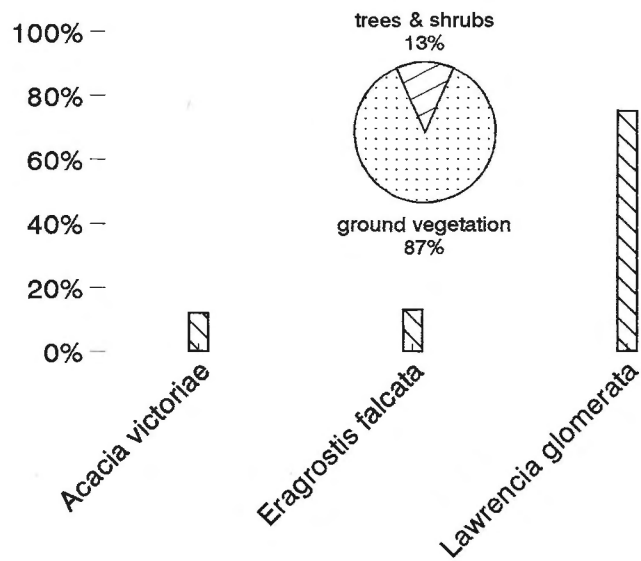


Fig. A2.91: saltmarsh, 08.08.89, D 1

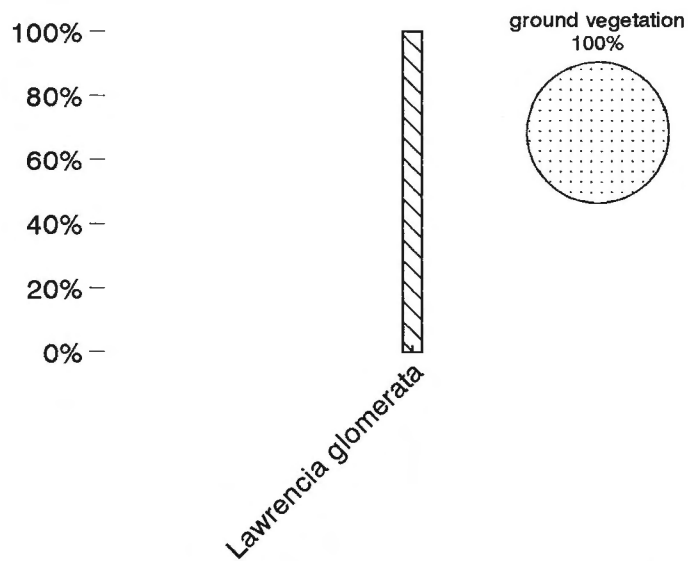


Fig. A2.92: saltmarsh, 09.09.88, E 8

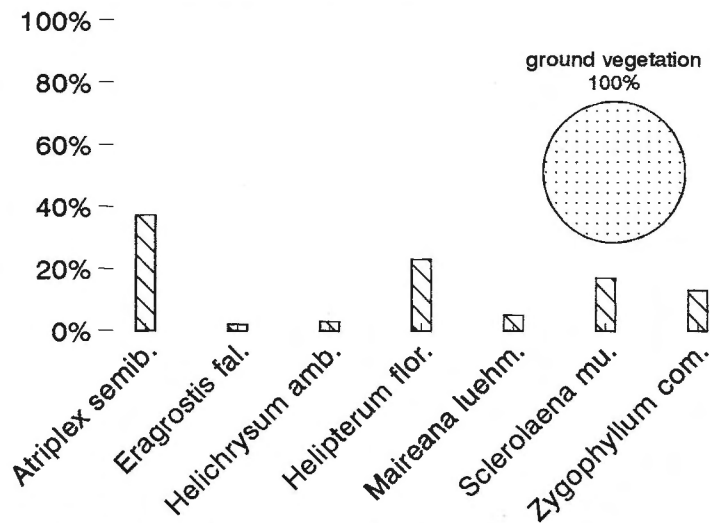


Fig. A2.93: saltmarsh, 11.09.89, D 10

Fig. A2.91-93: quantitative food selection from random samples

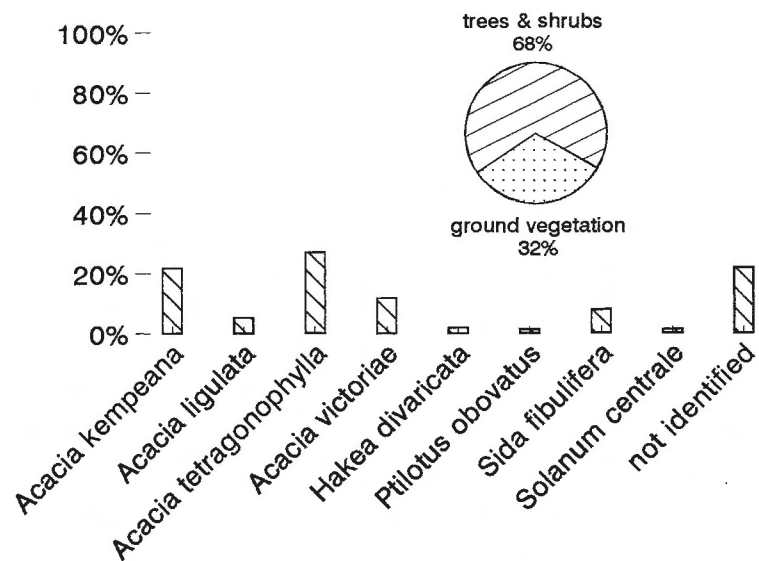


Fig. A3.1: bushland, 14.-15.02.87, BF5, BF4, n=152

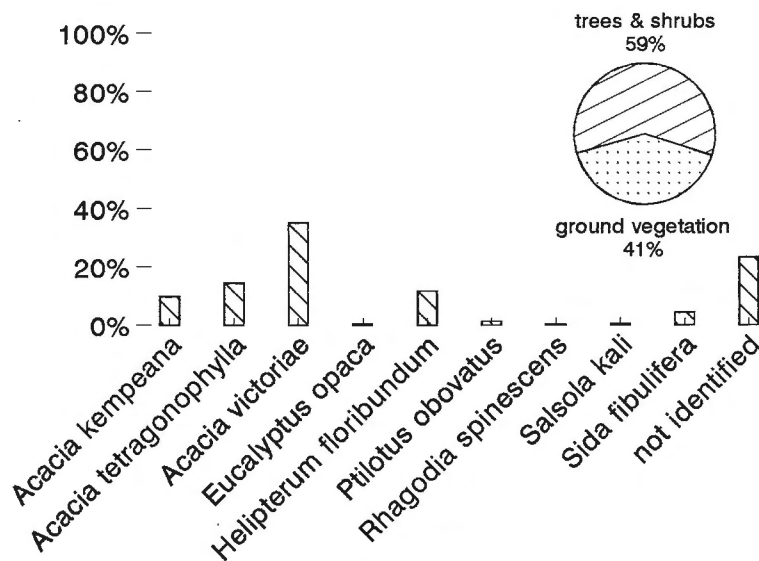


Fig. A3.2: bushland, 12.-14.03.87, BC6-8, BB8, BD9-10, n=718

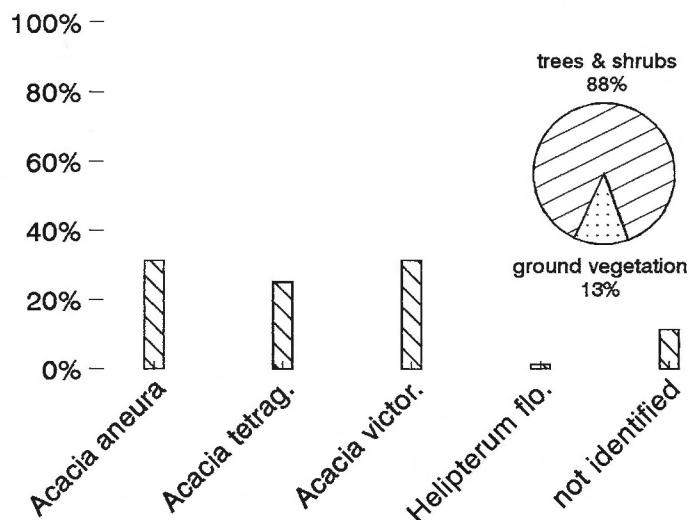


Fig. A3.3: bushland, 14.03.87, BG3, BH3, BH4, n=80

Fig. A3.1-3: quantitative food selection from continuous observation

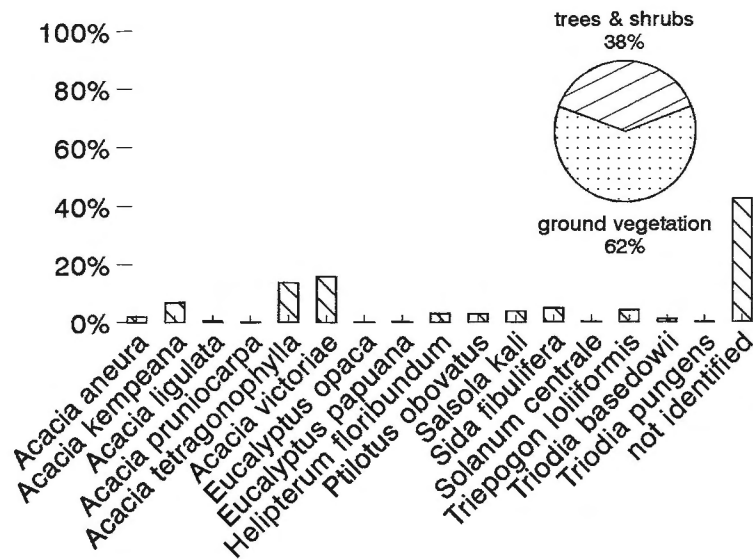


Fig. A3.4: bushland, 15.-16.03.87, BE7, BH9, BA9, BC9, n=741

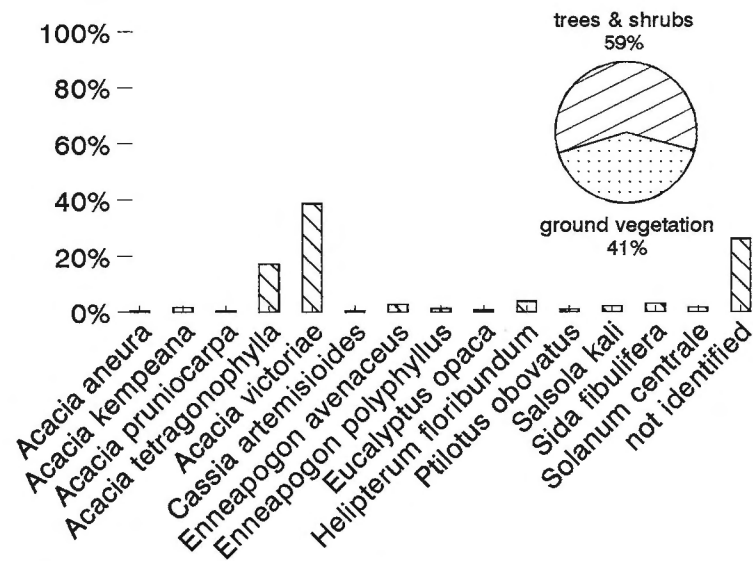


Fig. A3.5: bushland, 08.04.87, BF2, BF5, n=587

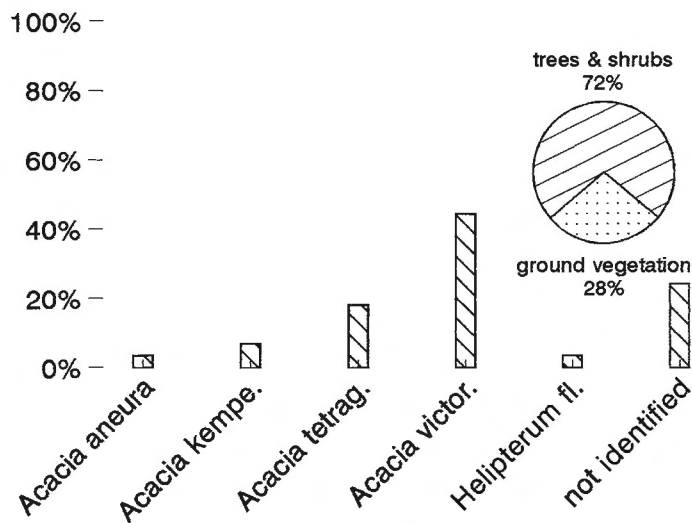


Fig. A3.6: bushland, 04.06.87, BB9, BB8, BC6, n=472

Fig. A3.4-6: quantitative food selection from continuous observation

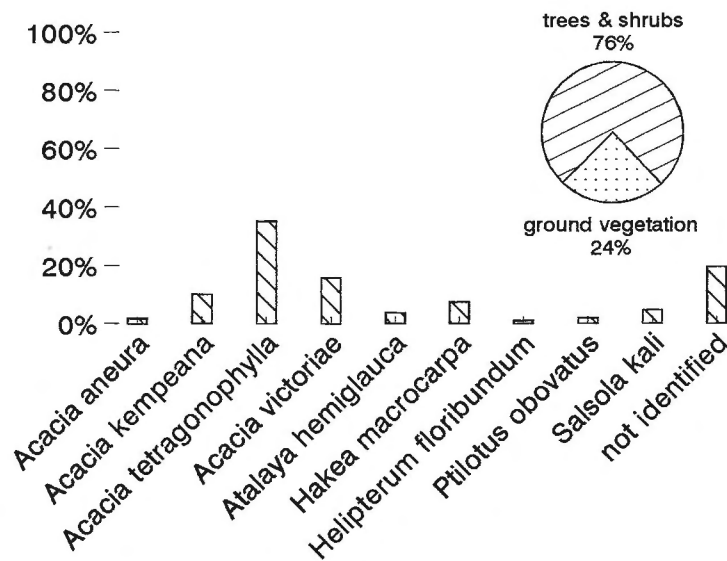


Fig. A3.7: bushland, 05.06.87, BD9, BG7, n=119

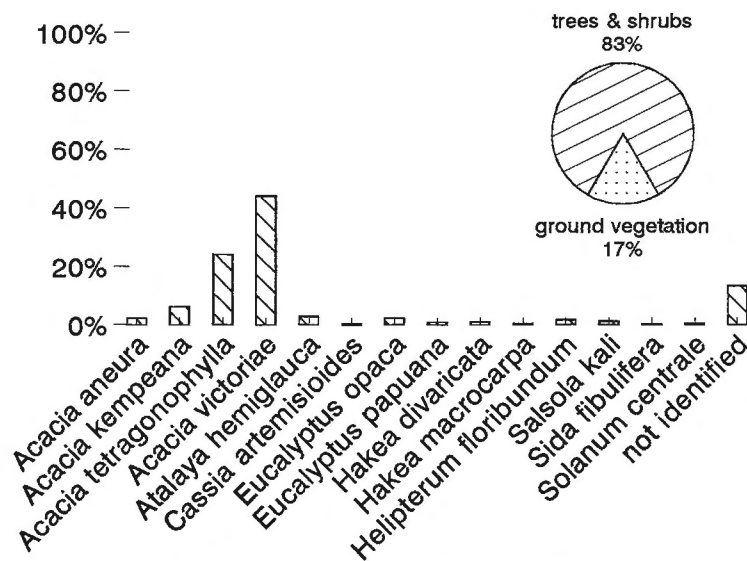


Fig. A3.8: bushland, 08.06.87, BD4, BF2, n=508

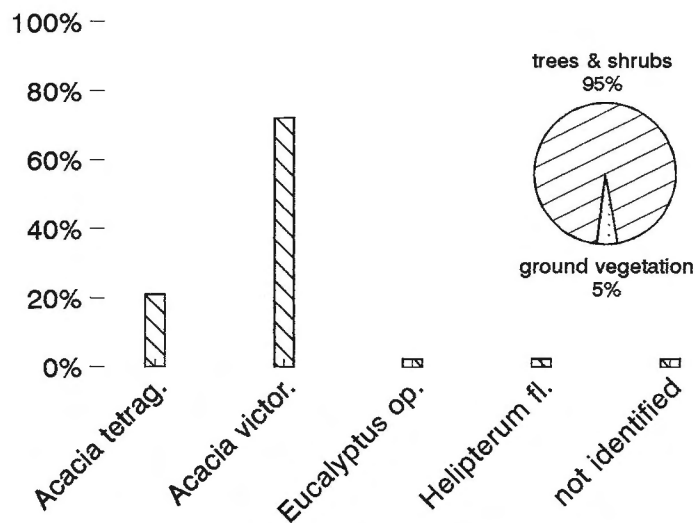


Fig. A3.9: bushland, 09.06.87, BA9, n=43

Fig. A3.7-9: quantitative food selection from continuous observation

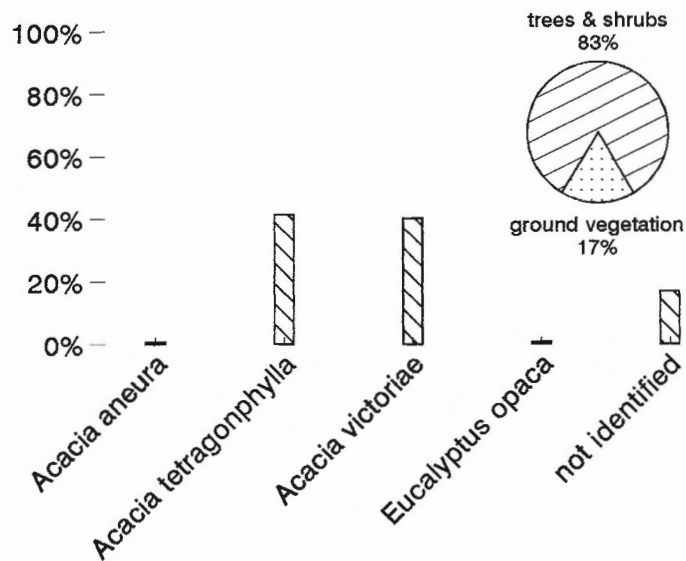


Fig. A3.10: bushland, 31.08.87, BF9, BE5, n=154

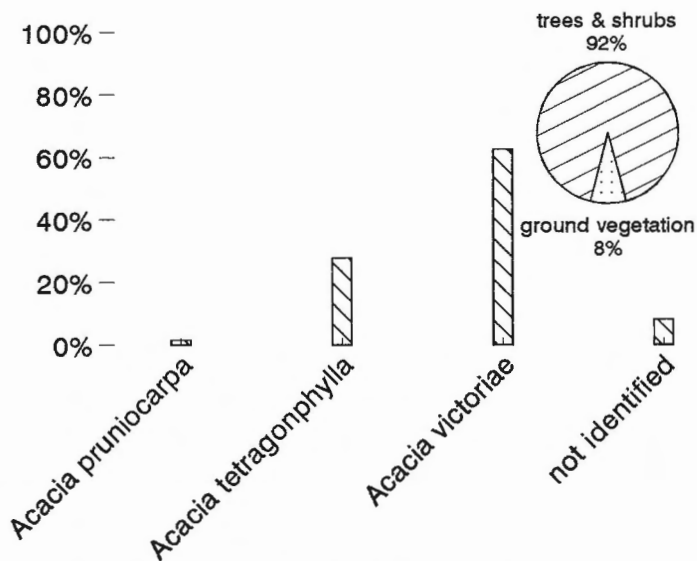


Fig. A3.11: bushland, 03.09.87, BG4, n=197

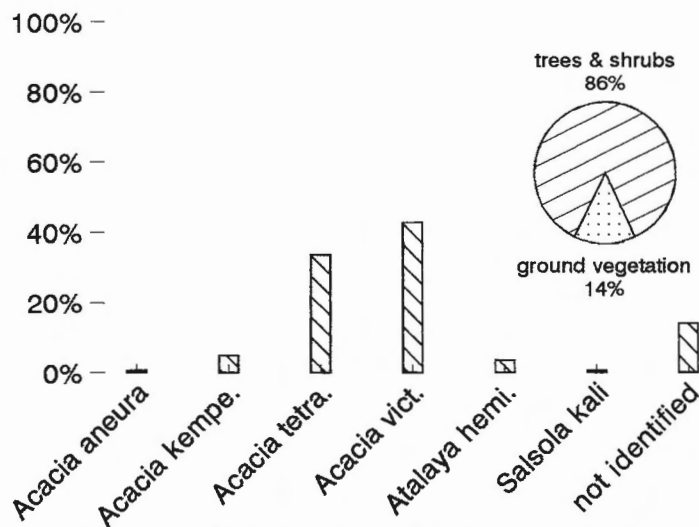


Fig. A3.12: bushland, 03.09.87, H15, H14, G14, n=142

Fig. A3.10-12: quantitative food selection from continuous observation



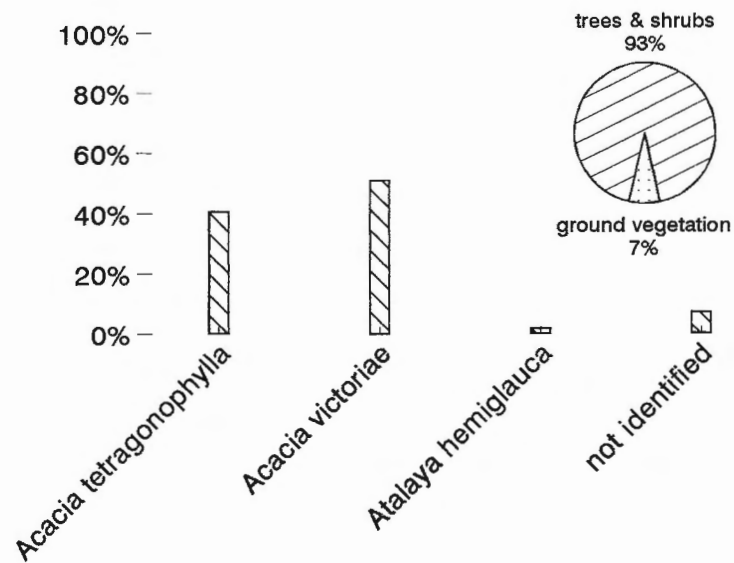


Fig. A3.13: bushland, 04.09.87, G17, G18, n=57

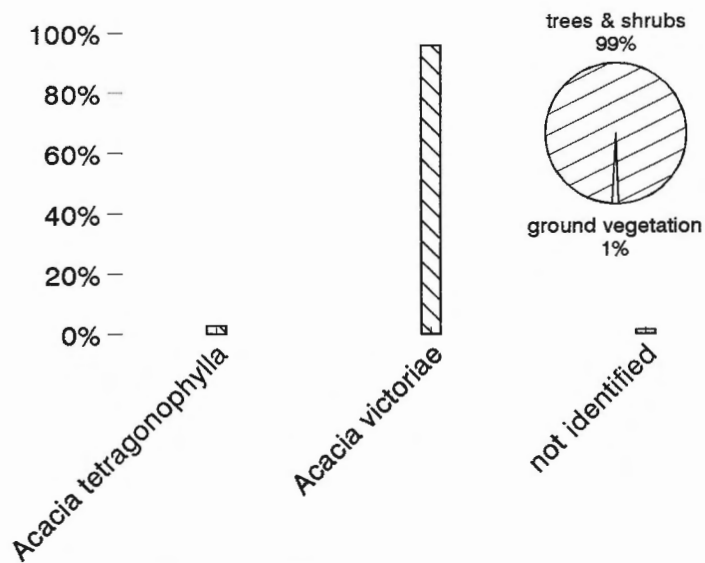


Fig. A3.14: bushland, 07.09.87, BC9, n=142

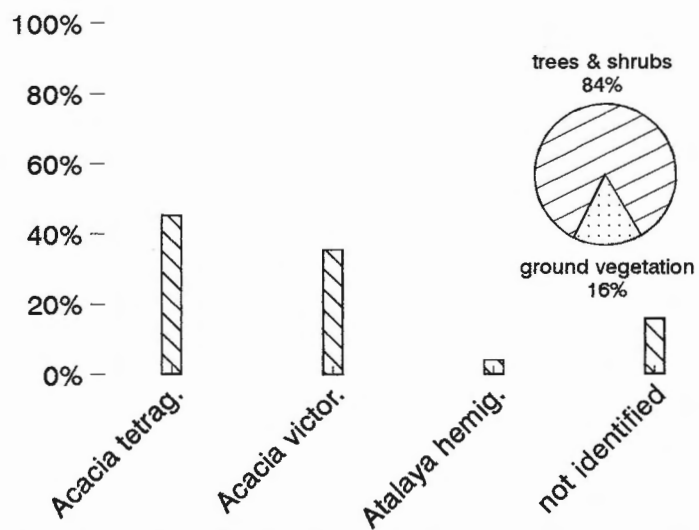


Fig. A3.15: bushland, 08.09.87, G16, n=51

Fig. A3.13-15: quantitative food selection from continuous observation

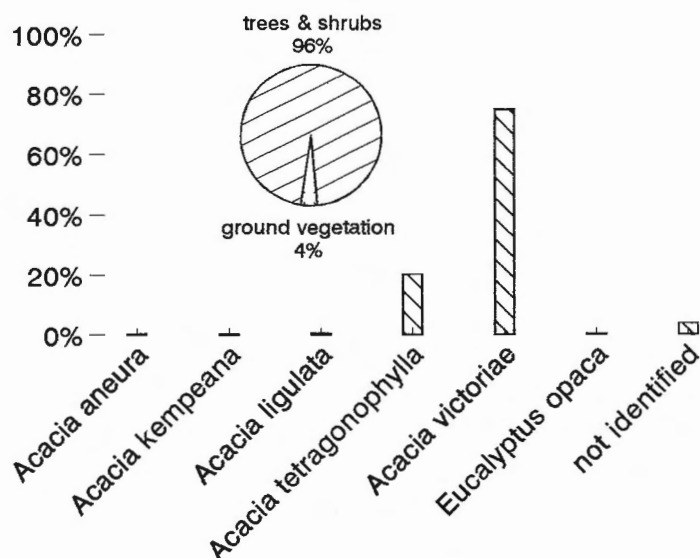


Fig. A3.16: bushland, 08.08.87, BF2, BD3, BE6, BE7, n=349

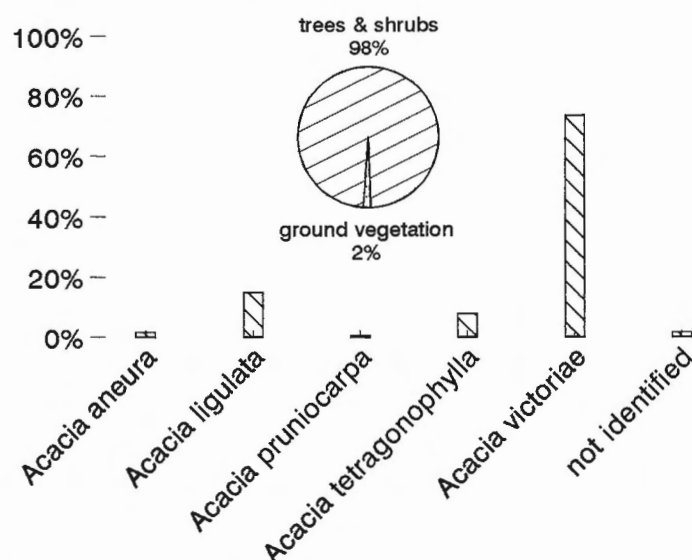


Fig. A3.17: bushland, 30.09.87, BG5, BE2, n=181

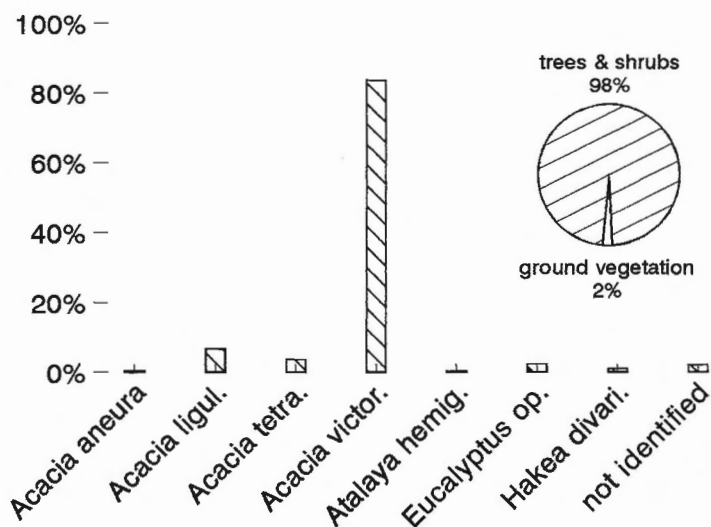


Fig. A3.18: bushland, 02.10.87, BG6, BF5, BE5, BD6, n=453

Fig. A3.16-18: quantitative food selection from continuous observation

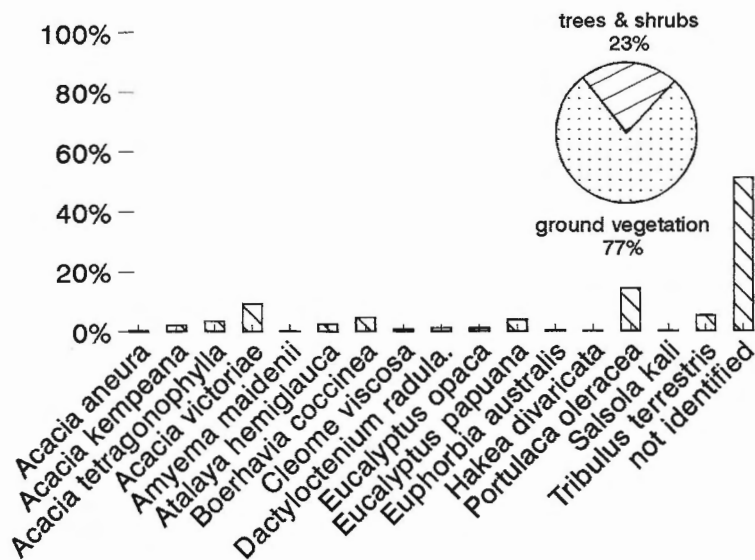


Fig. A3.19: bushland, 02.-04.03.88, I2-4, J2, K2, H2, n=918

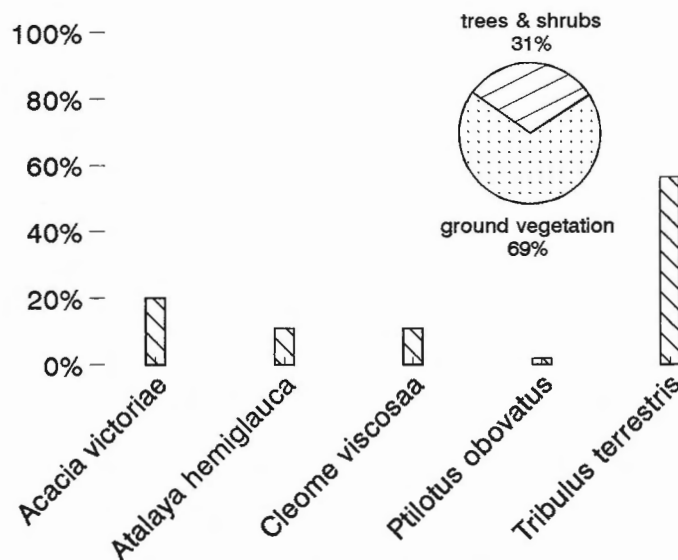


Fig. A3.20: bushland, 28.03.88, G19, n=55

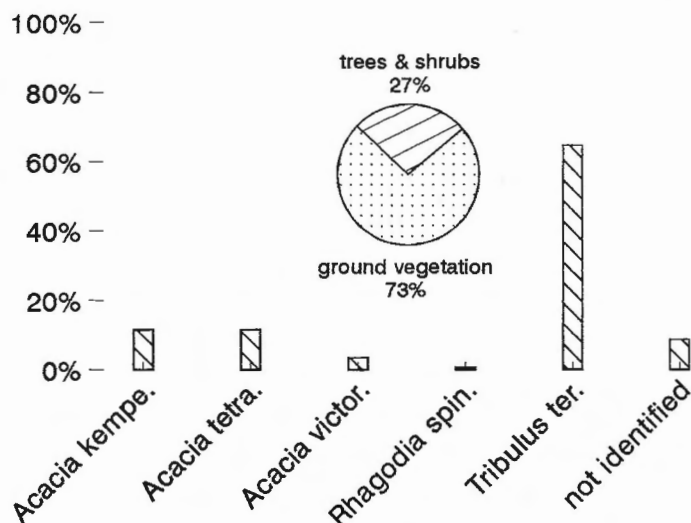


Fig. A3.21: bushland, 27.04.88, H3, G3, H2, n=175

Fig. A3.19-21: quantitative food selection from continuous observation

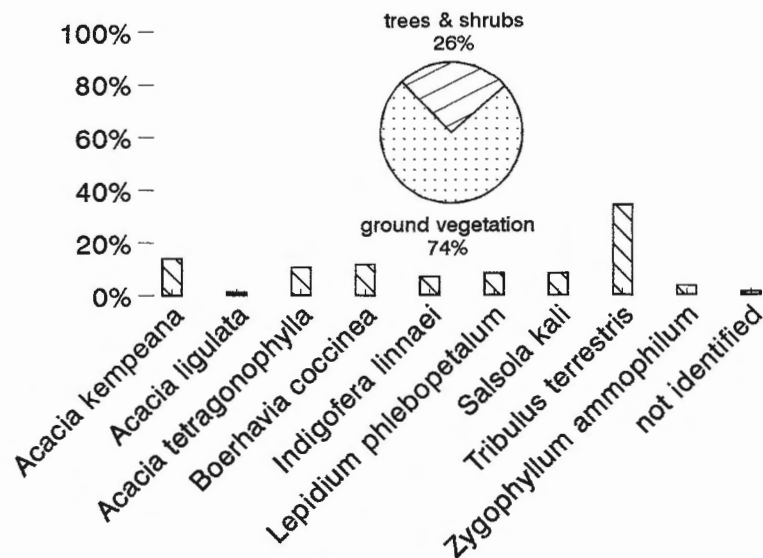


Fig. A3.22: bushland, 21.05.88, BC5, n=85

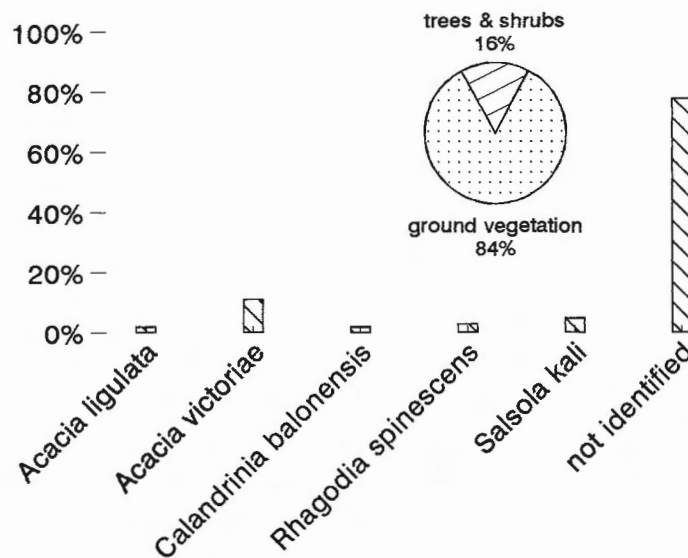


Fig. A3.23: bushland, 23.05.88, F1, G1, G2, n=108

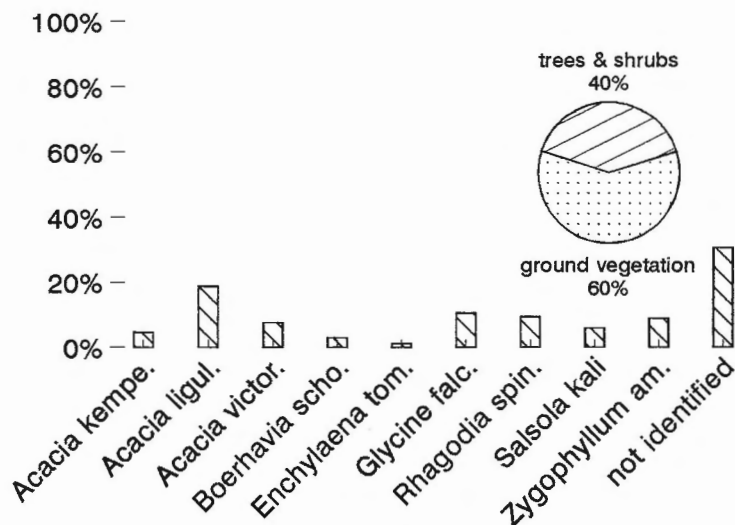


Fig. A3.24: bushland, 23.05.88, F2, F1, G2, n=171

Fig. A3.22-24: quantitative food selection from continuous observation

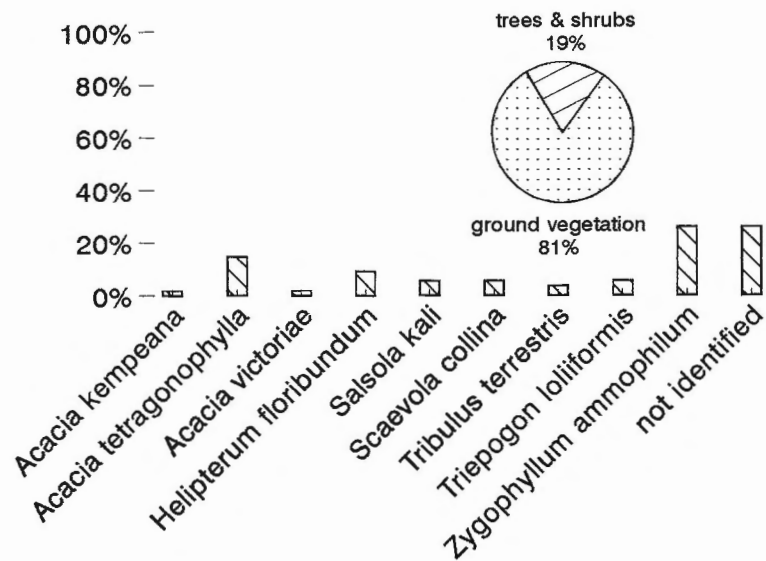


Fig. A3.25: bushland, 29.05.88, BB8, n=54

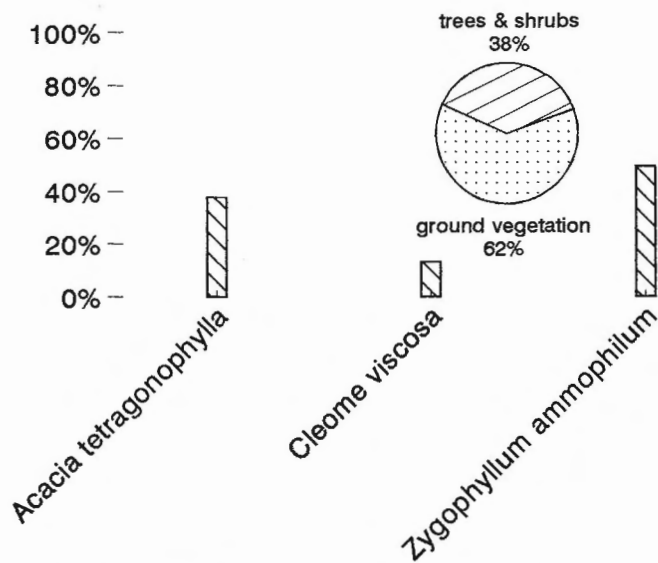


Fig. A3.26: bushland, 19.06.88, BB8, BC8, n=61

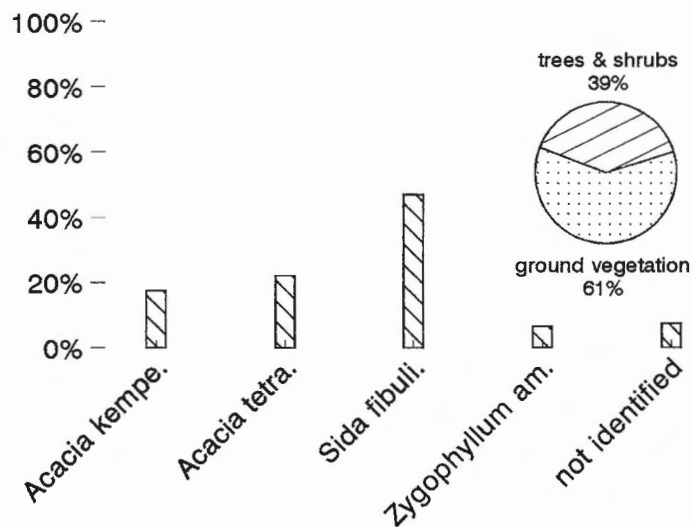


Fig. A3.27: bushland, 22.06.88, BB9, BB8, n=109

Fig. A3.25-27: quantitative food selection from continuous observation

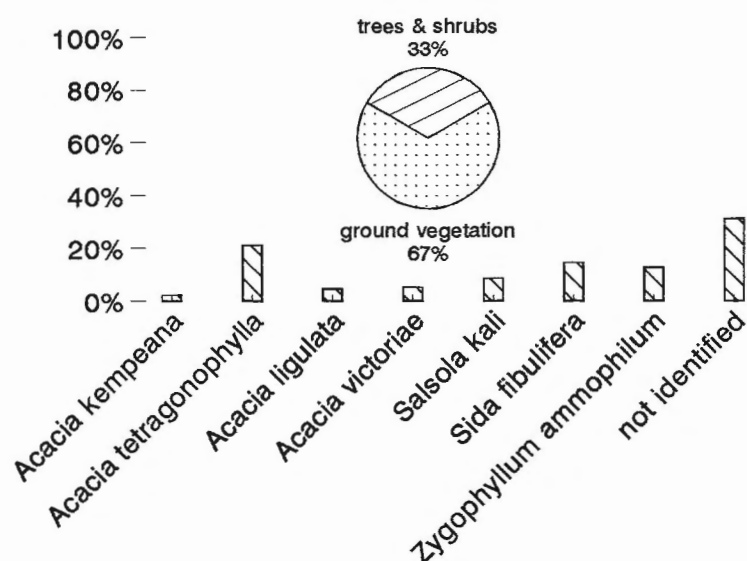


Fig. A3.28: bushland, 25.06.88, BC9, BB9, BA9, BA10, n=174

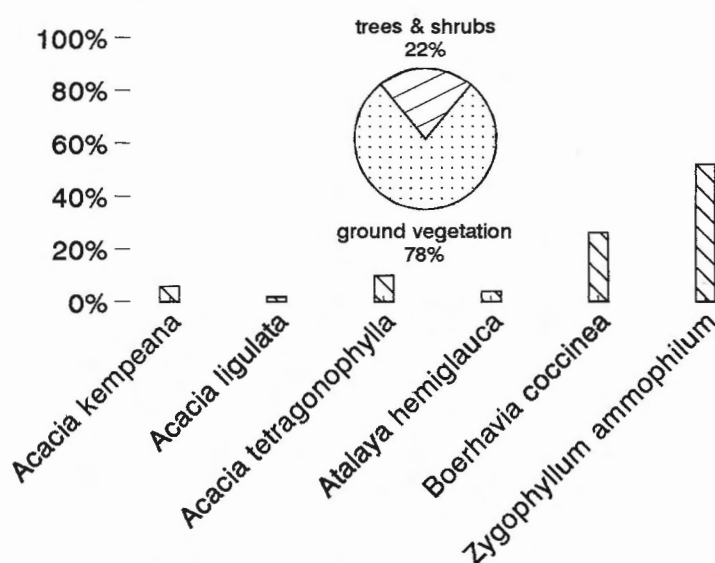


Fig. A3.29: bushland, 09.07.88, BF6-8, BE5-6, n=50

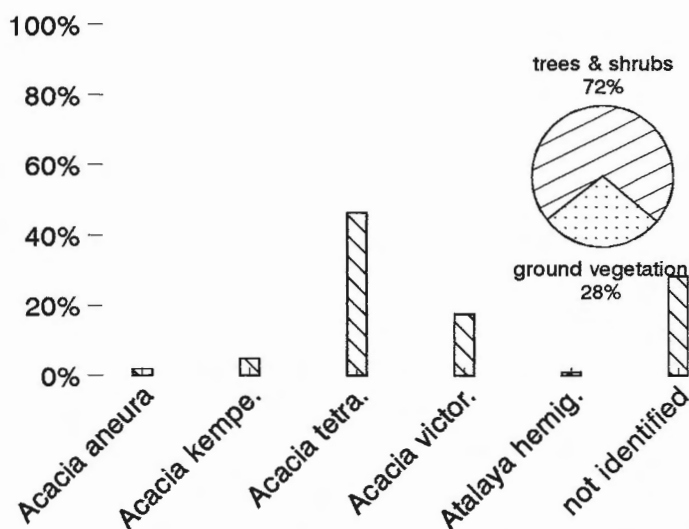


Fig. A3.30: bushland, 14.07.88, BB9, BC9, BD9, BE10, n=205

Fig. A3.28-30: quantitative food selection from continuous observation

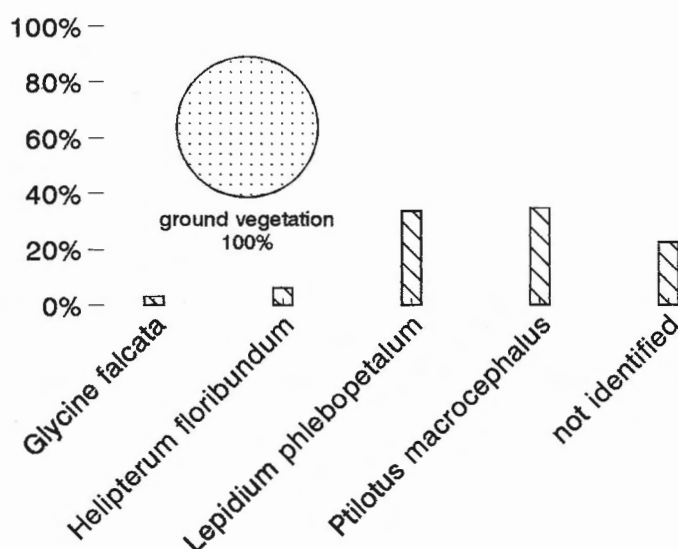


Fig. A3.31: bushland, 23.07.88, F2, G2, n=98

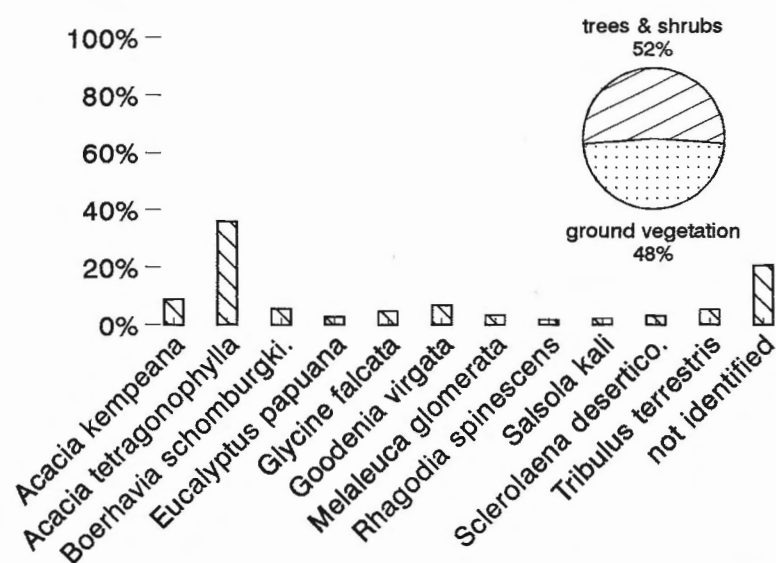


Fig. A3.32: bushland, 25.-26.07.88, G6-12, H6-11, I9, n=485

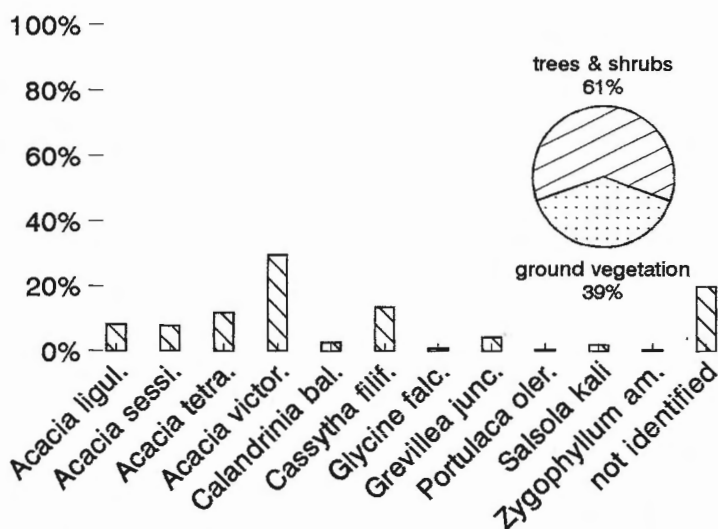


Fig. A3.33: bushland, 24.-25.09.88, C13-18, D19-21, n=454

Fig. A3.31-33: quantitative food selection from continuous observation

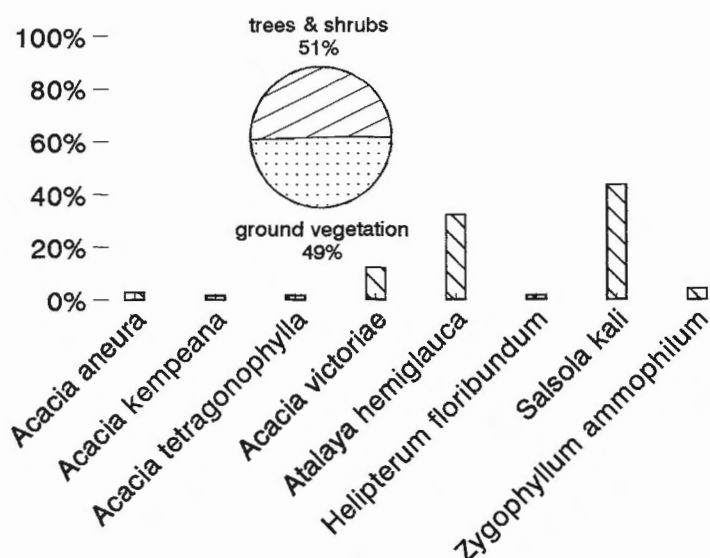


Fig. A3.34: bushland, 06.10.88, H17, n=237

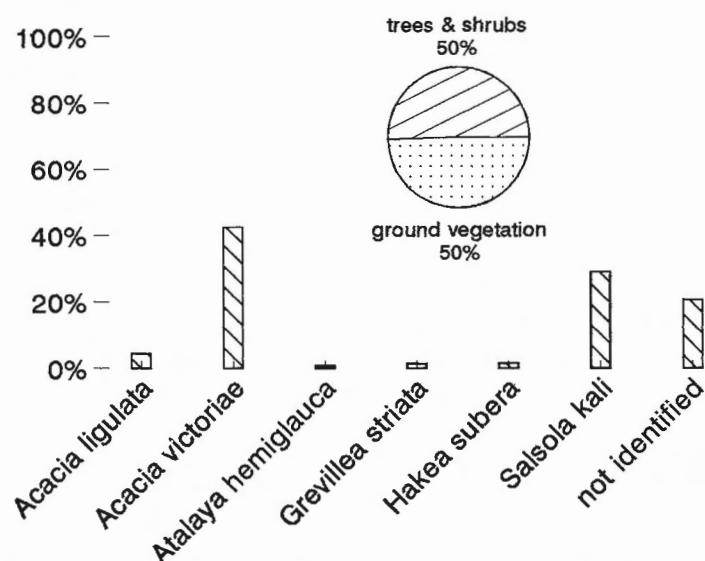


Fig. A3.35: bushland, 14.-15.11.88, H13-19, J17-18, n=525

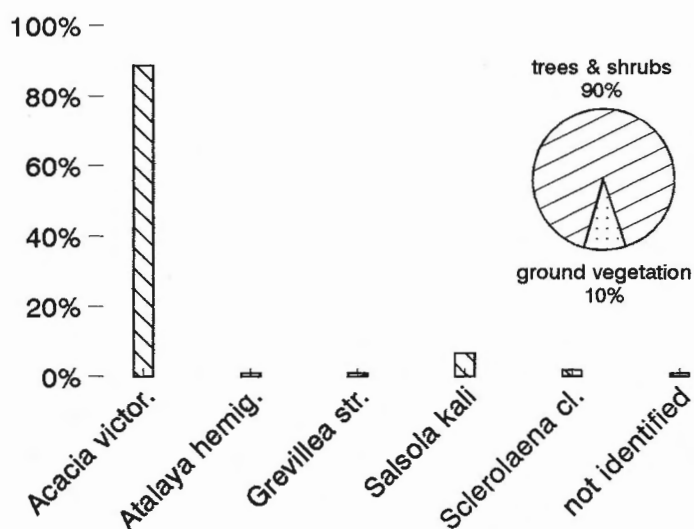


Fig. A3.36: bushland, 16.11.88, J2, J3, I3, H3, n=105

Fig. A3.34-36: quantitative food selection from continuous observation



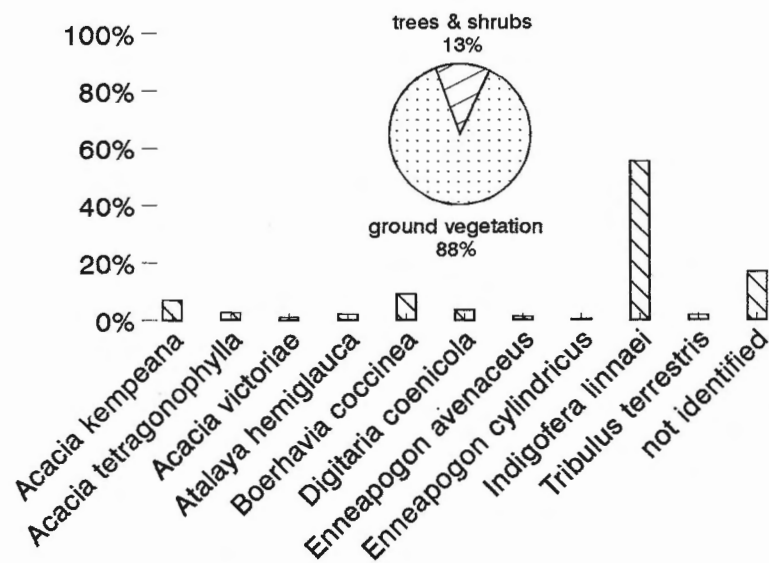


Fig. A3.37: bushland, 18.-19.12.88, J4, J3, J2, n=432

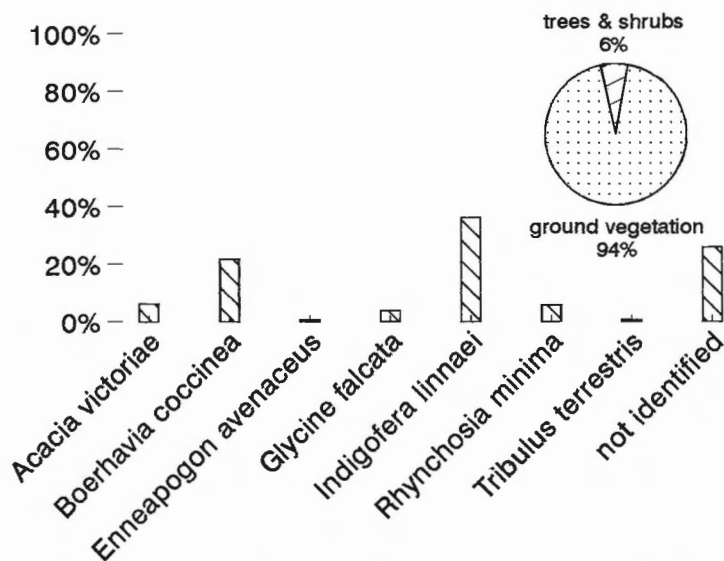


Fig. A3.38: bushland, 11.-12.01.89, I4, H4, H3, G3, n=323

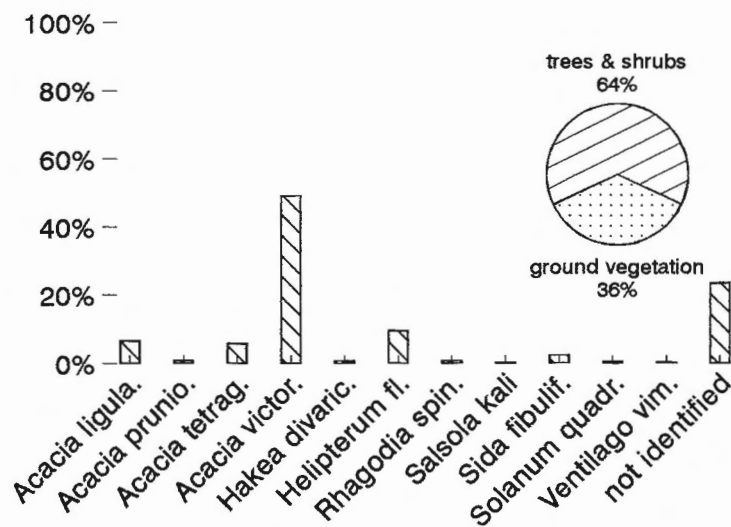


Fig. A3.39: sandplain/dunes, 02.12.86, BE6, BI3, n=397

Fig. A3.37-39: quantitative food selection from continuous observation

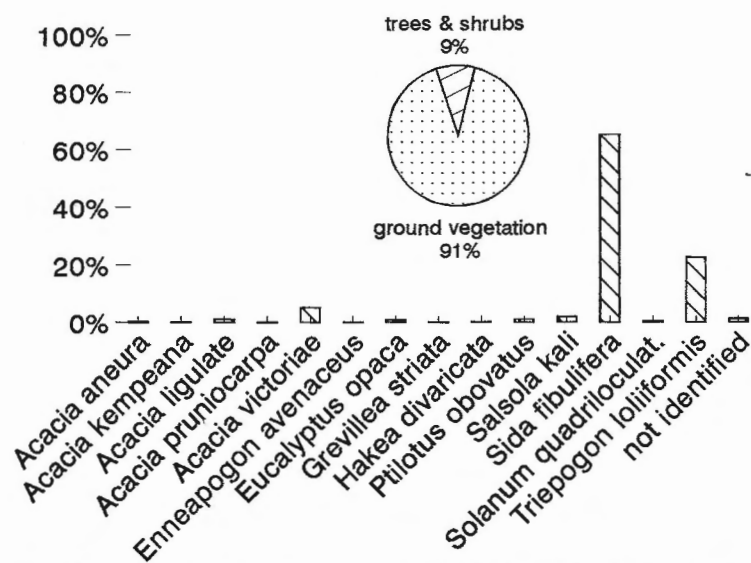


Fig. A3.40: sandplain/dunes, 29.01.87, BG5, BH5-7, BE7, n=1633

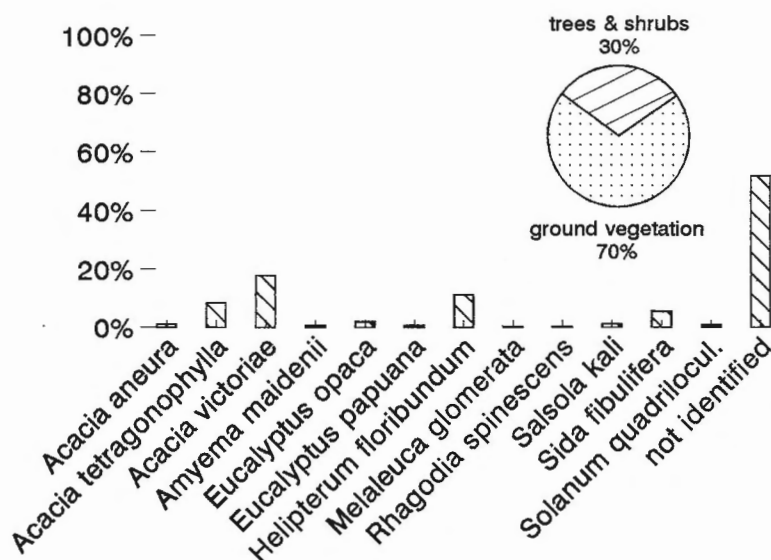


Fig. A3.41: sandplain/dunes, 07.03.87, BF3, BD3, BE5, n=1462

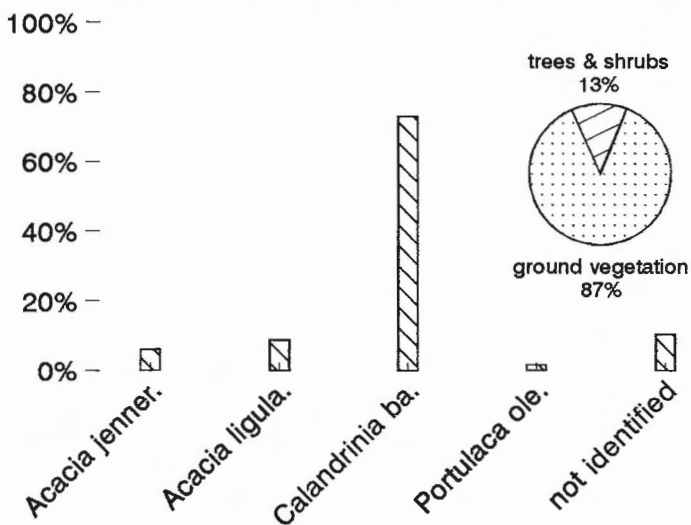


Fig. A3.42: sandplain/dunes, 09.09.87, B13, C13, n=202

Fig. A3.40-42: quantitative food selection from continuous observation

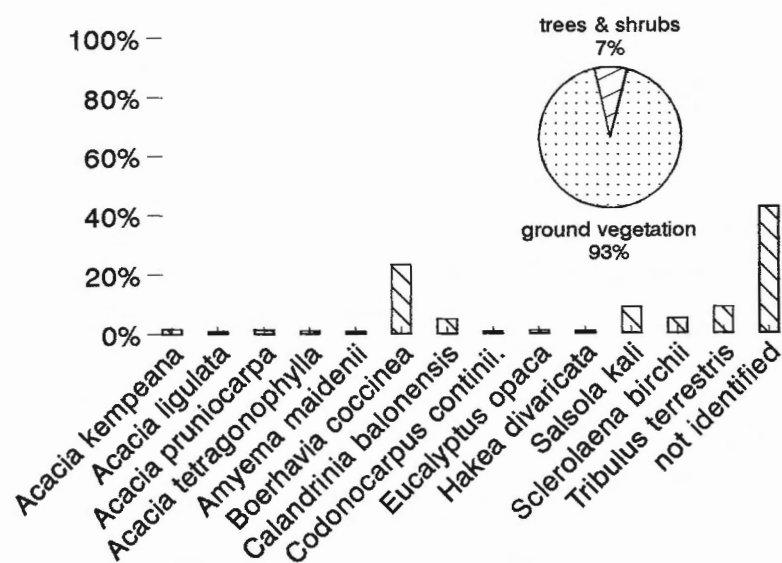


Fig. A3.43: sandplain/dunes, 03.02.88, M7-11, N11, n=311

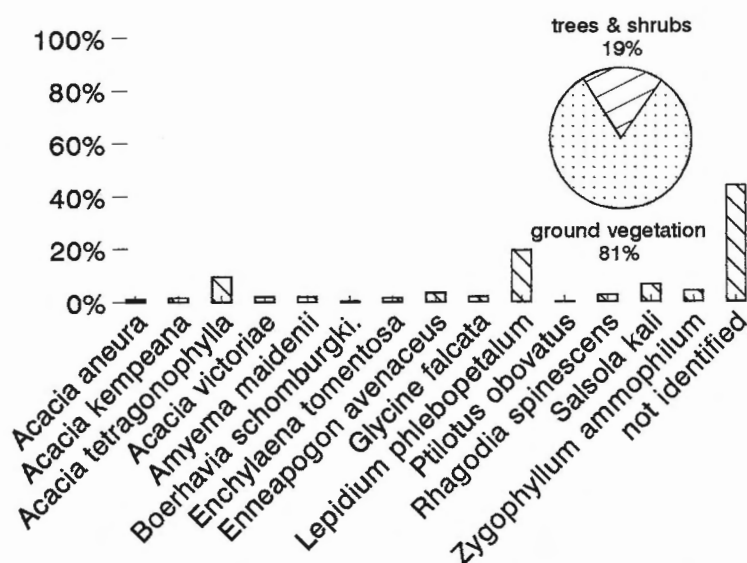


Fig. A3.44: sandplain/dunes, 29.-30.04.88, E4, E5, n=500

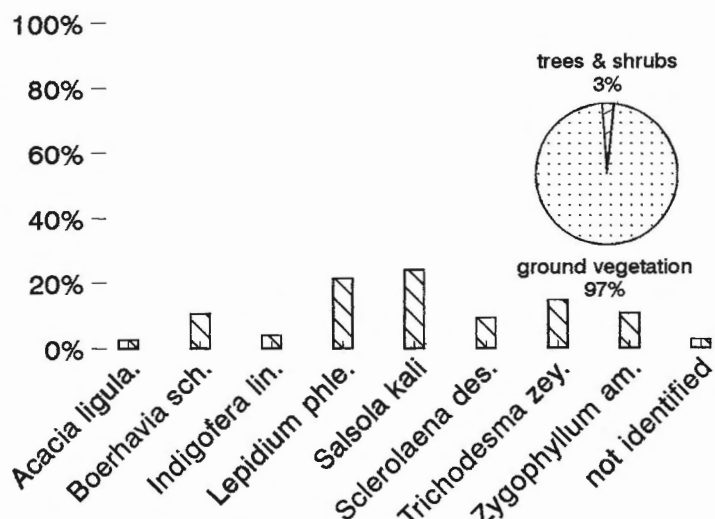


Fig. A3.45: sandplain/dunes, 02.05.88, D3, n=75

Fig. A3.43-45: quantitative food selection from continuous observation

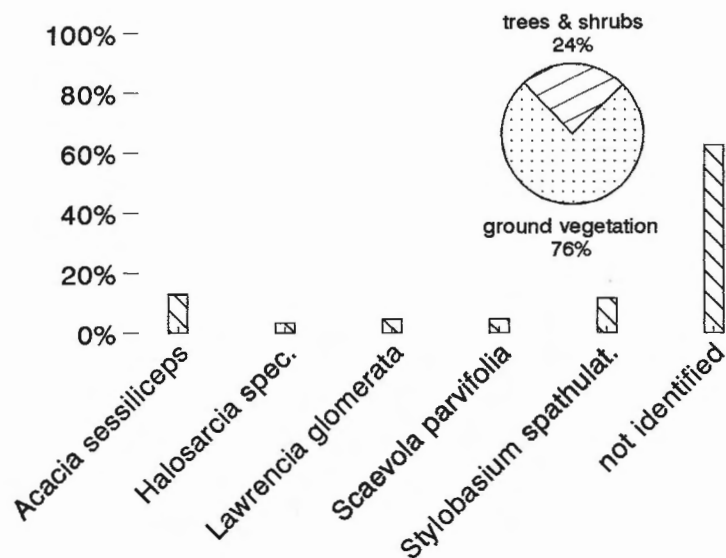


Fig. A3.46: sandplain/dunes, 20.-21.05.88, E4, E5, n=147

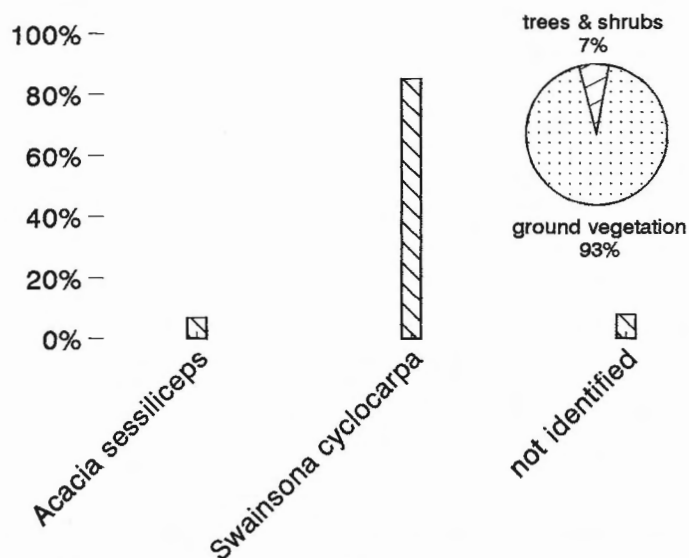


Fig. A3.47: sandplain-saltmarsh, 31.05.88, C20, B20, C16, n=189

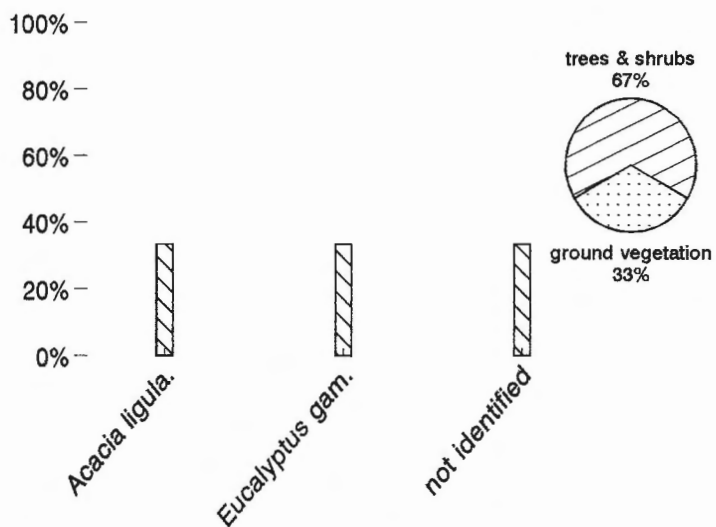


Fig. A3.48: sandplain/dunes, 22.06.88, C2, E3, n=150

Fig. A3.46-48: quantitative food selection from continuous observation

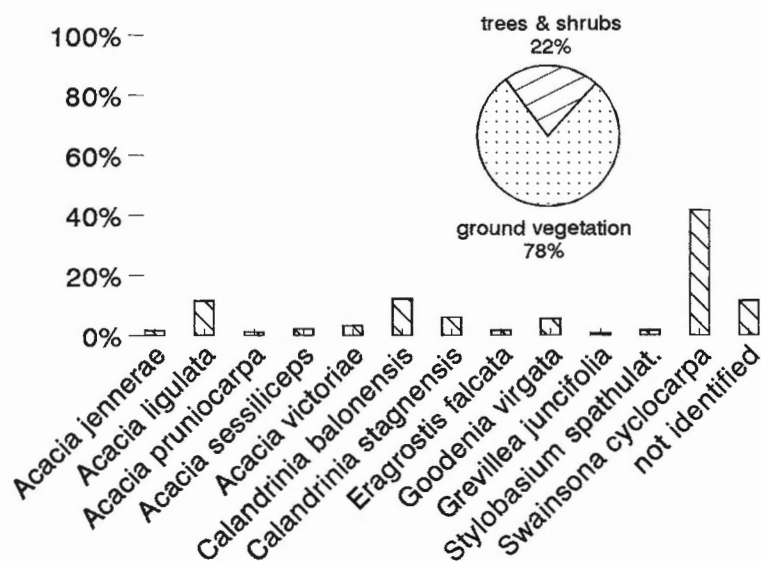


Fig. A3.49: sandplain/dunes, 15.08.88, C21, D21, E21, n=183

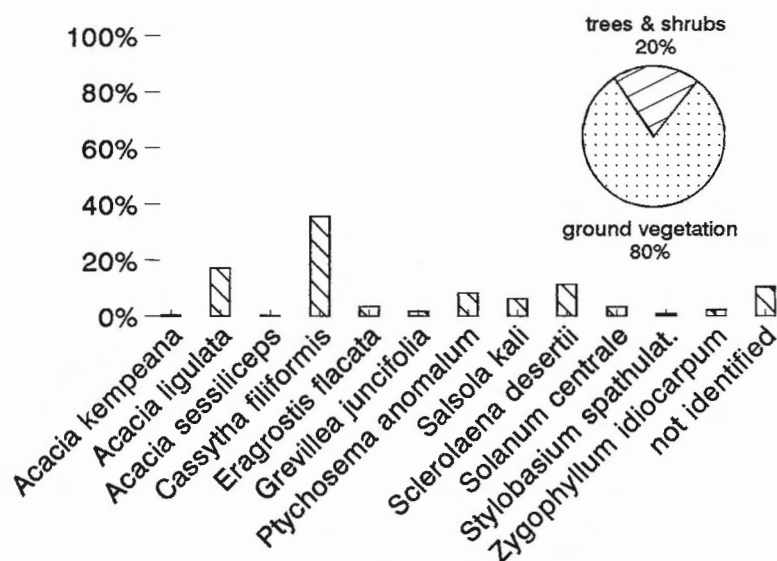


Fig. A3.50: sandplain/dunes, 25.08.88, C12-14, E13-16, n=637

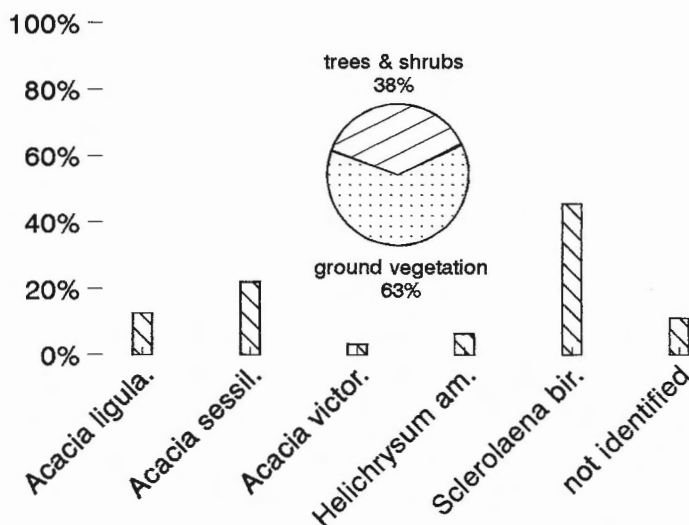


Fig. A3.51: sandplain/dunes, 24.10.88, E9, D8, n=64

Fig. A3.49-51: quantitative food selection from continuous observation

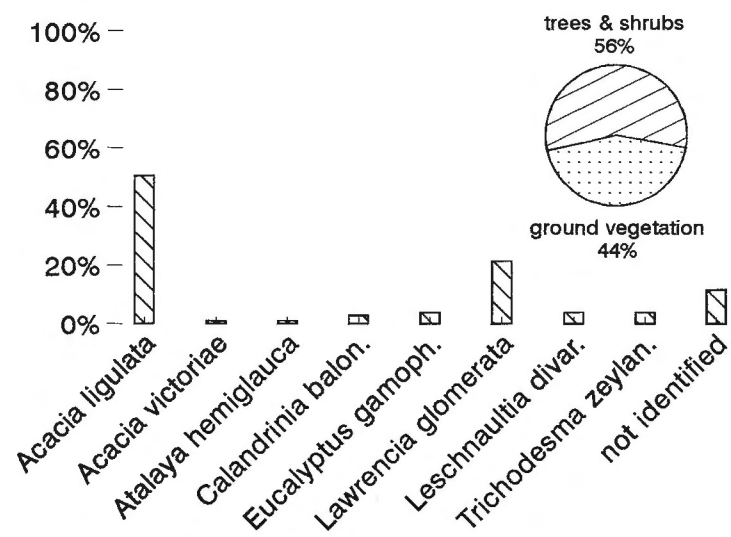


Fig. A3.52: sandplain/dunes, 17.11.88, C2, n=103

Fig. A3.52: quantitative food selection from continuous observation

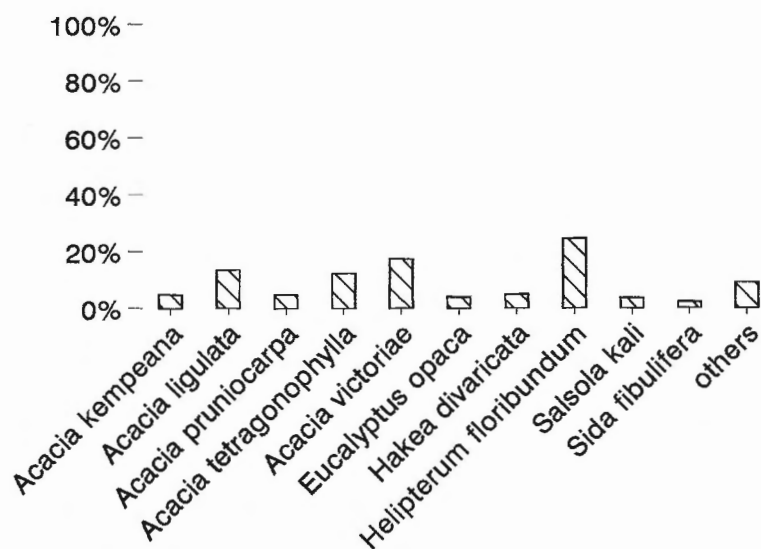


Fig. A4.1: main food plants in November 1986

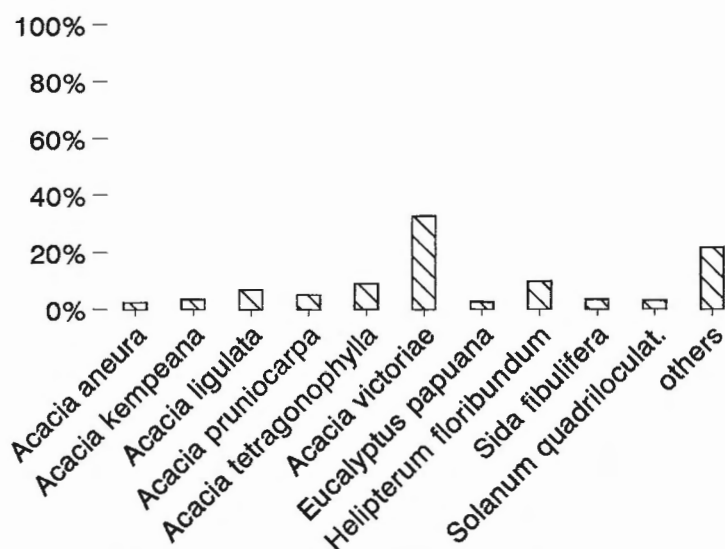


Fig. A4.2: main food plants in December 1986

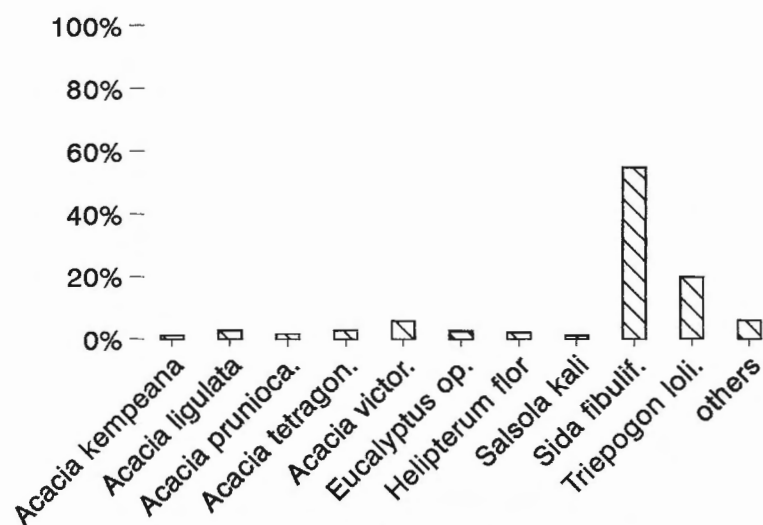


Fig. A4.3: main food plants in January 1987

Fig. A4.1-3: main food plants from Nov. 1986 to Jan. 1987

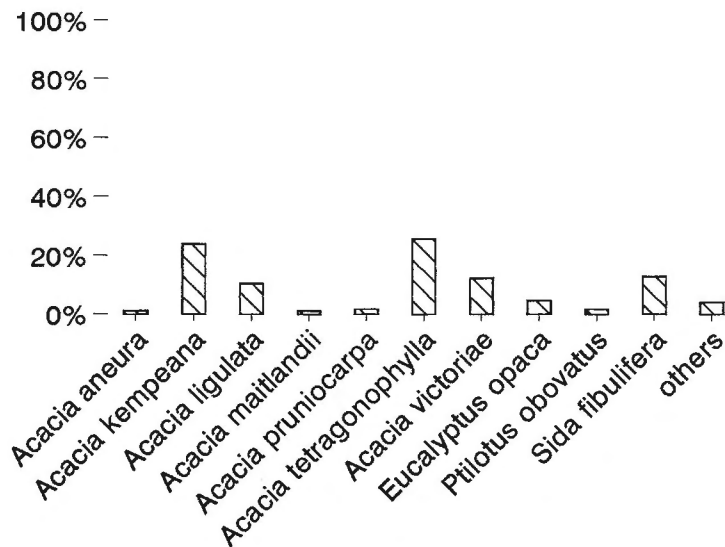


Fig. A4.4: main food plants in February 1987

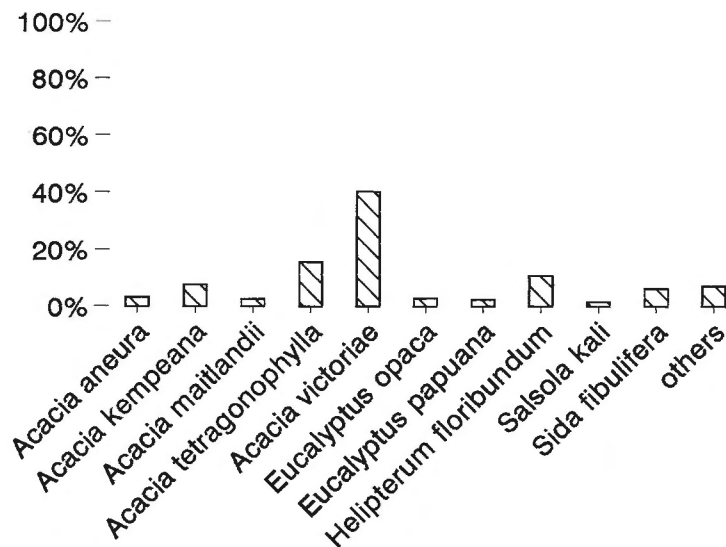


Fig. A4.5: main food plants in March 1987

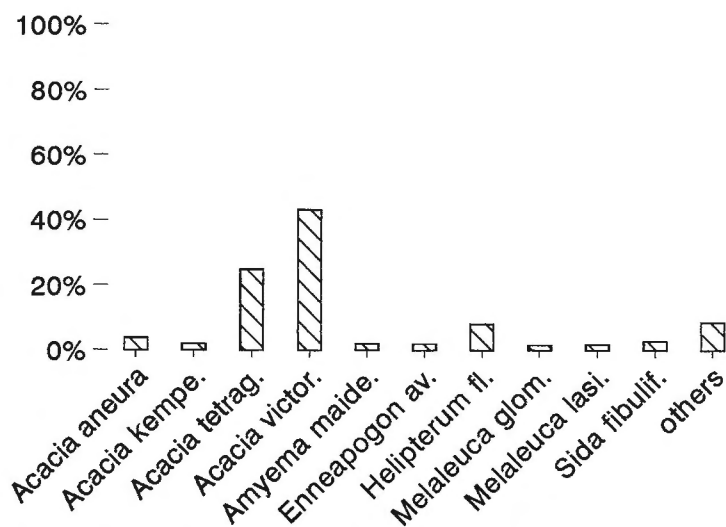


Fig. A4.6: main food plants in April 1987

Fig. A4.4-6: main food plants from February to April 1987



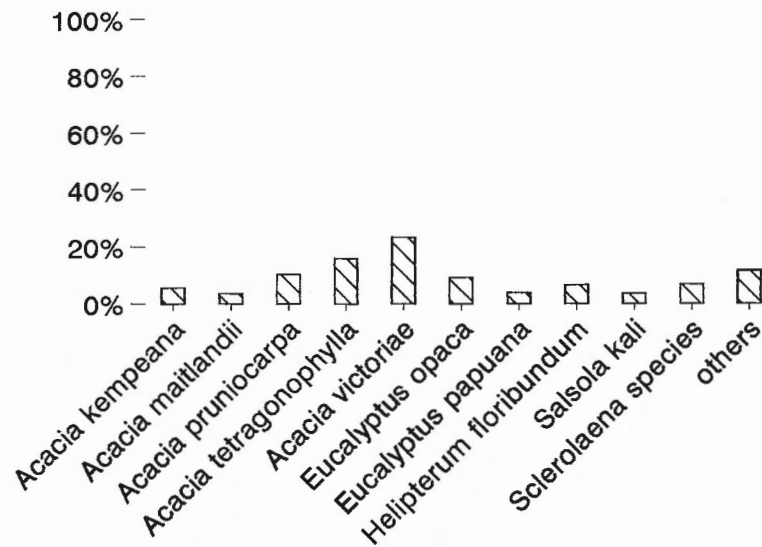


Fig. A4.7: main food plants in May 1987

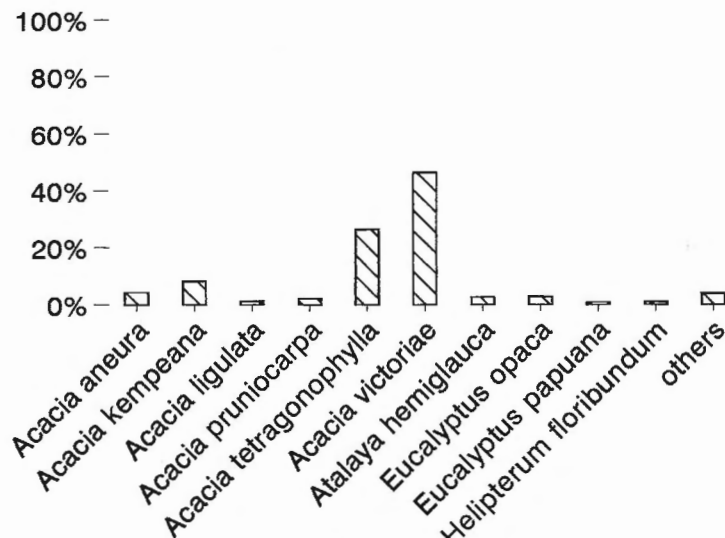


Fig. A4.8: main food plants in June 1987

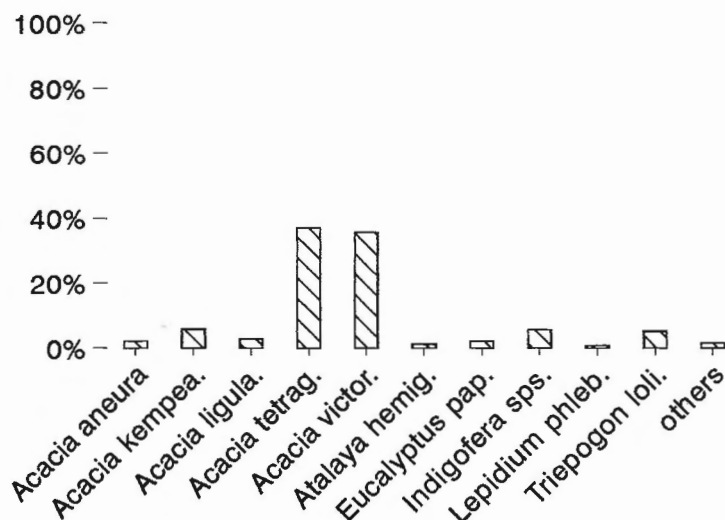


Fig. A4.9: main food plants in July 1987

Fig. A4.7-9: main food plants from May to July 1987

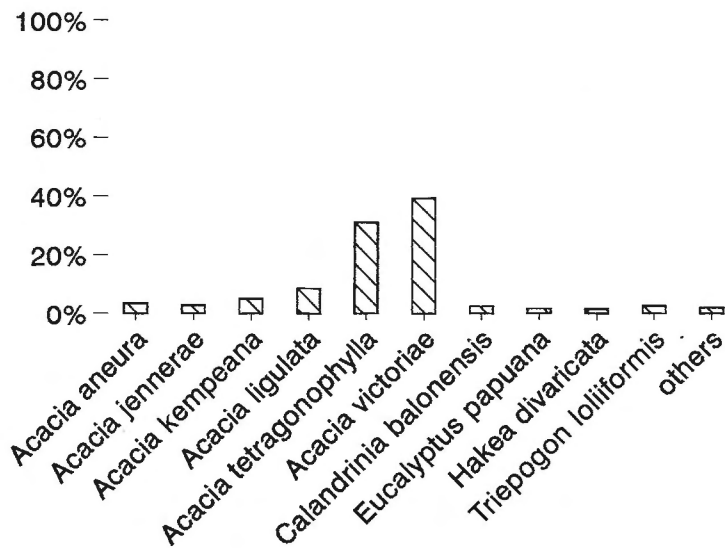


Fig. A4.10: main food plants in August 1987

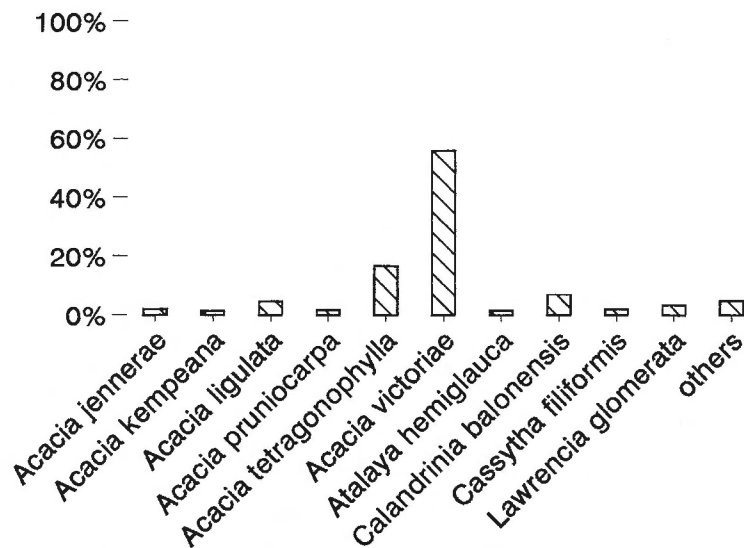


Fig. A4.11: main food plants in September 1987

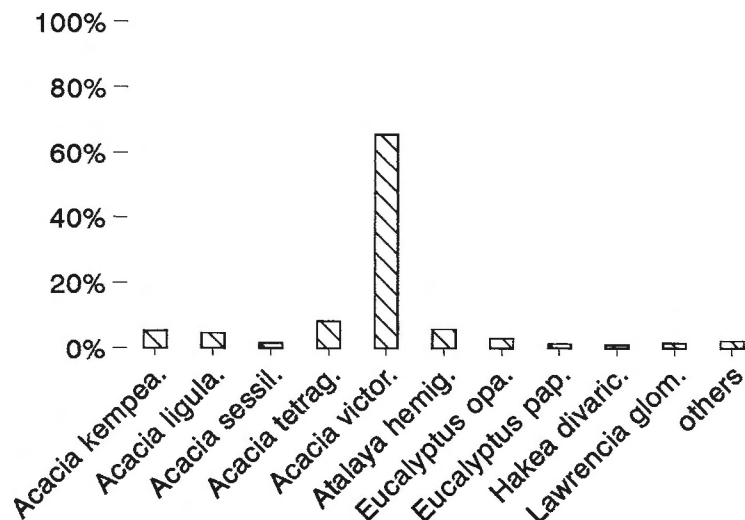


Fig. A4.12: main food plants in October 1987

Fig. A4.10-12: main food plants from August to October 1987

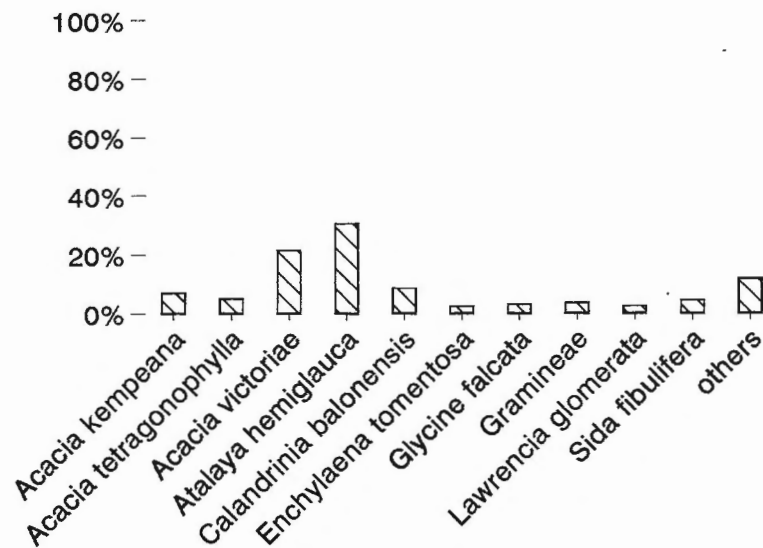


Fig. A4.13: main food plants in November 1987

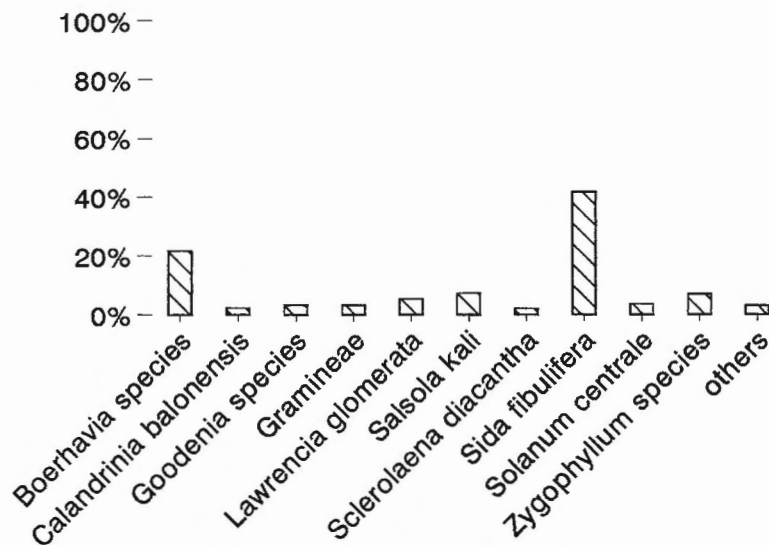


Fig. A4.14: main food plants in December 1987

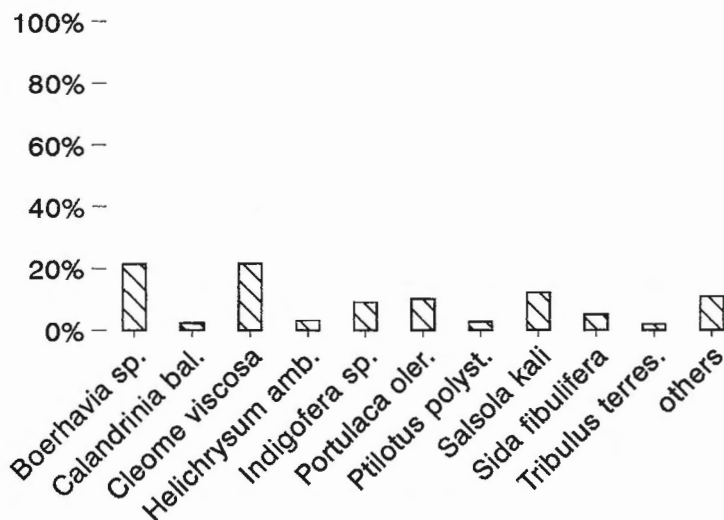


Fig. A4.15: main food plants in January 1988

Fig. A4.13-15: main food plants from Nov. 1987 to Jan. 1988

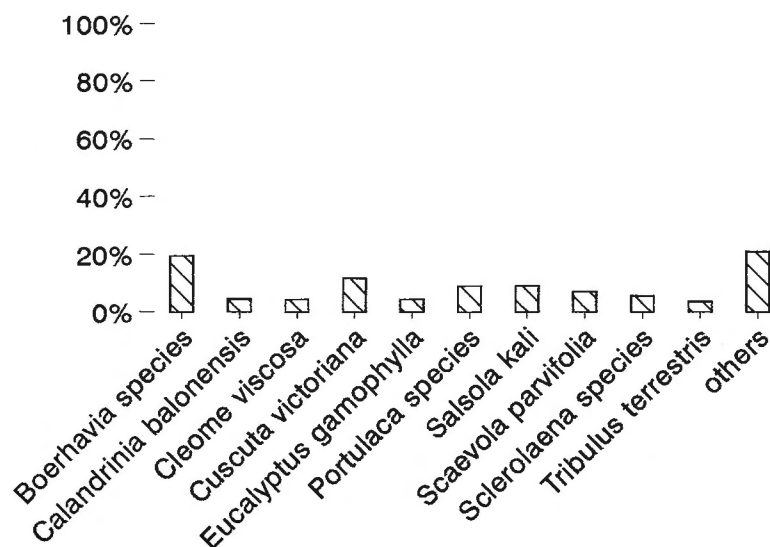


Fig. A4.16: main food plants in February 1988

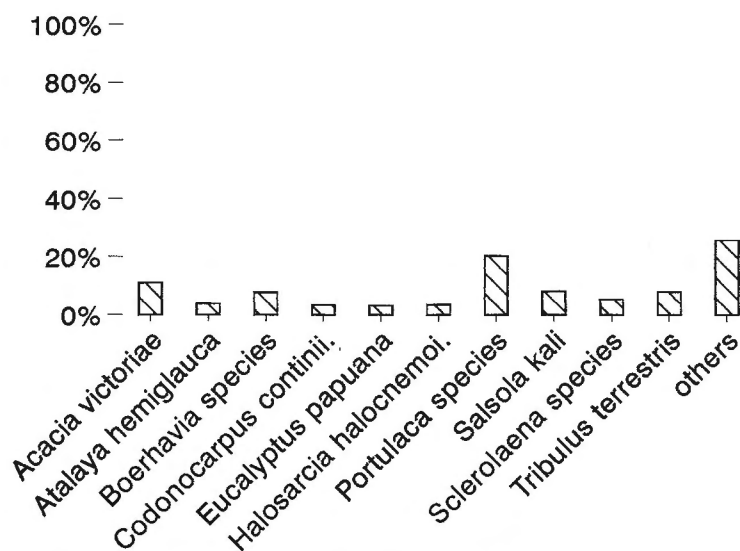


Fig. A4.17: main food plants in March 1988

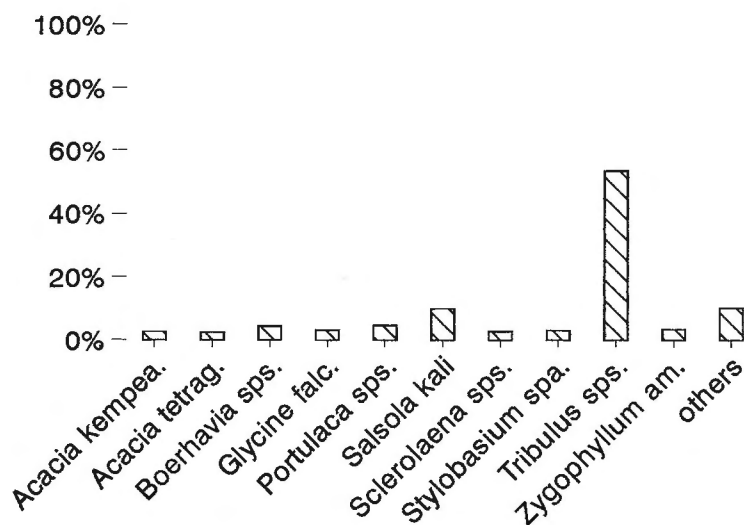


Fig. A4.18: main food plants in April 1988

Fig. A4.16-18: main food plants from February to April 1988

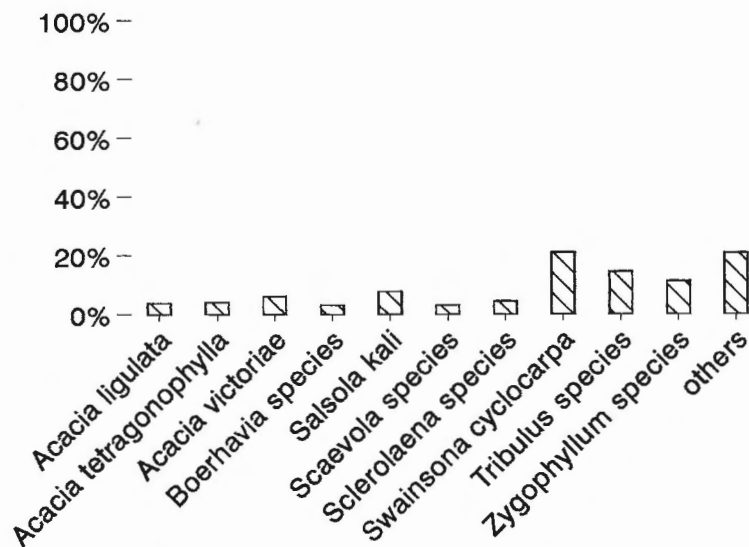


Fig. A4.19: main food plants in May 1988

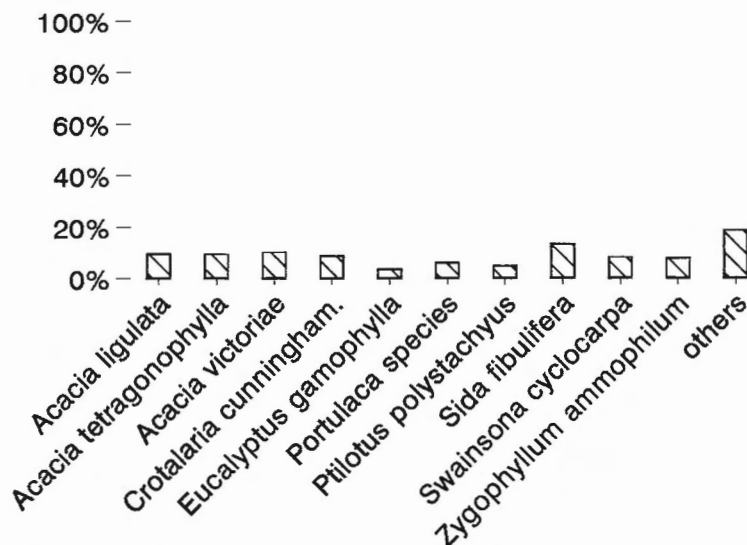


Fig. A4.20: main food plants in June 1988

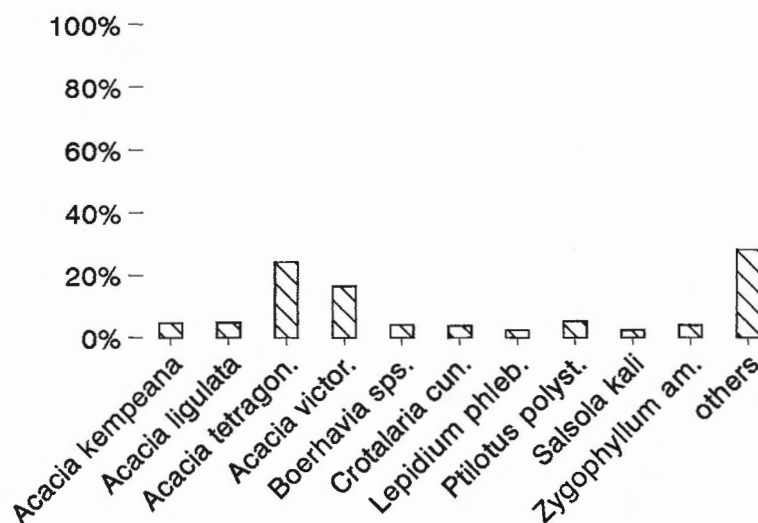


Fig. A4.21: main food plants in July 1988

Fig. A4.19-21: main food plants from May to July 1988

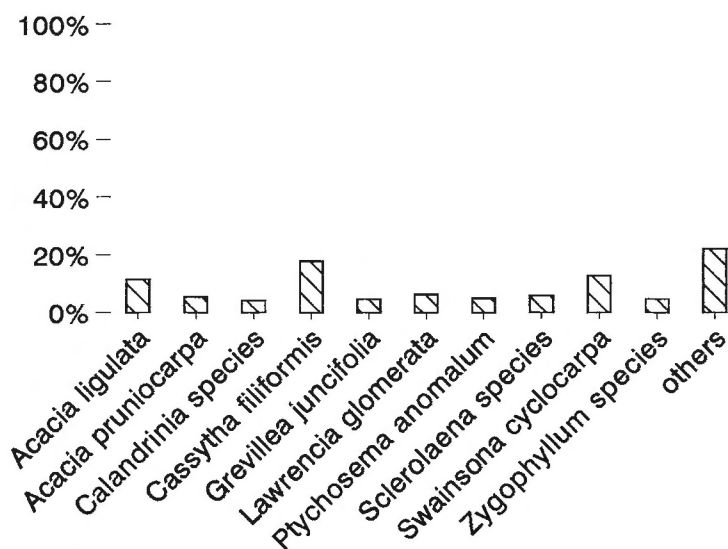


Fig. A4.22: main food plants in August 1988

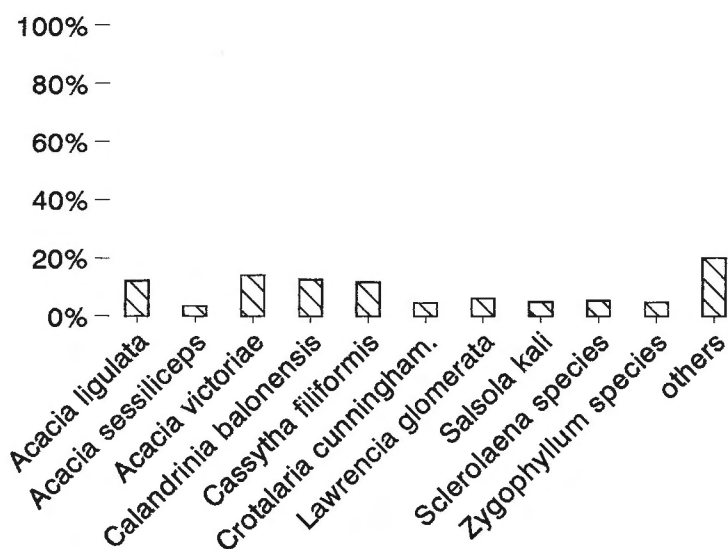


Fig. A4.23: main food plants in September 1988

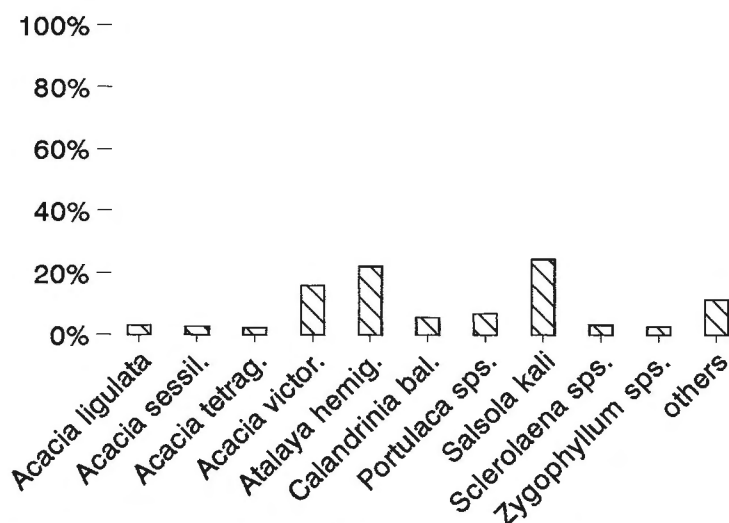


Fig. A4.24: main food plants in October 1988

Fig. A4.22-24: main food plants from August to October 1988

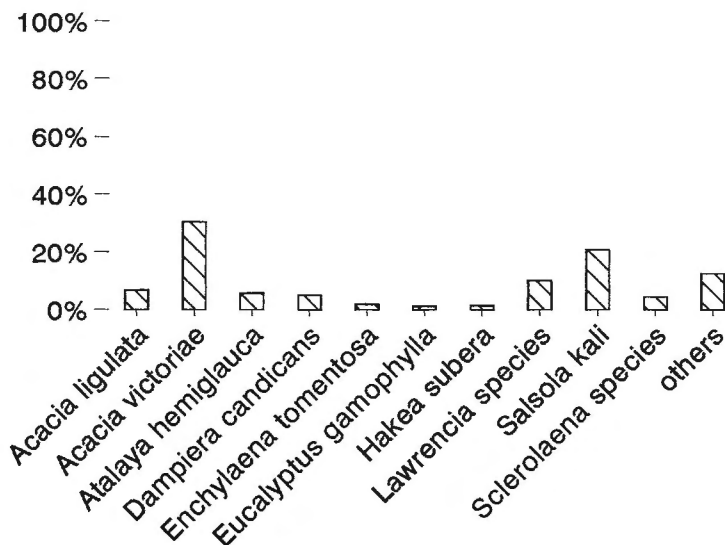


Fig. A4.25: main food plants in November 1988

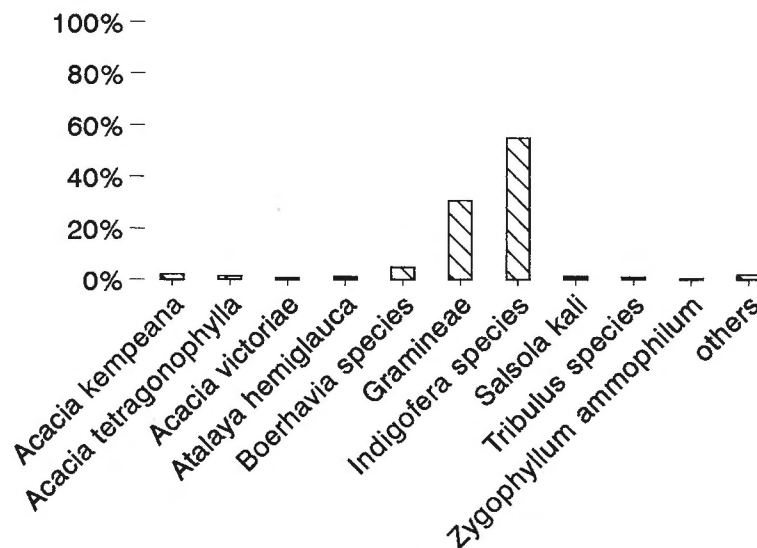


Fig. A4.26: main food plants in December 1988

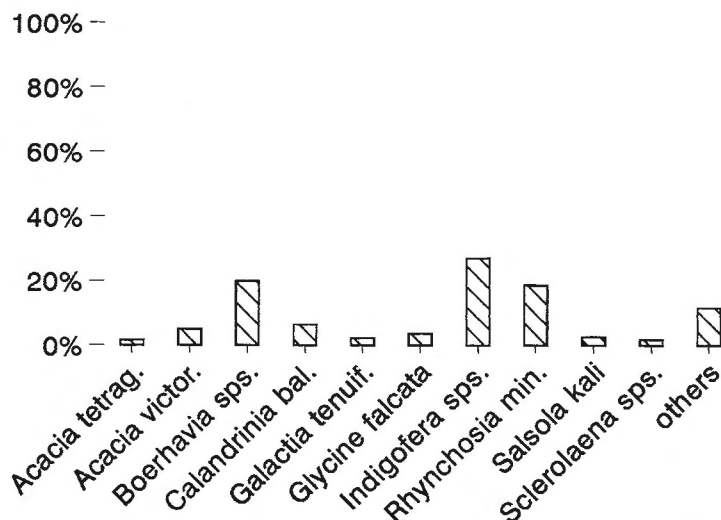


Fig. A4.27: main food plants in January 1989

Fig. A4.25-27: main food plants from Nov. 1988 to Jan. 1989

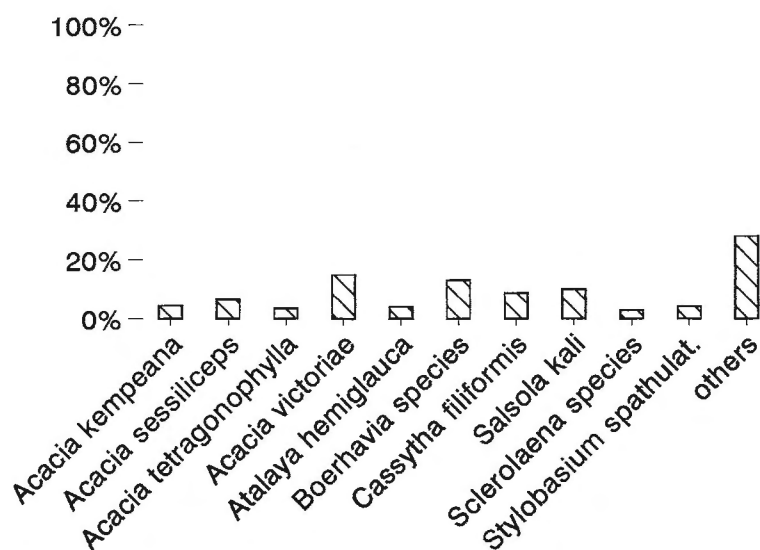


Fig. A4.28: main food plants in February 1989

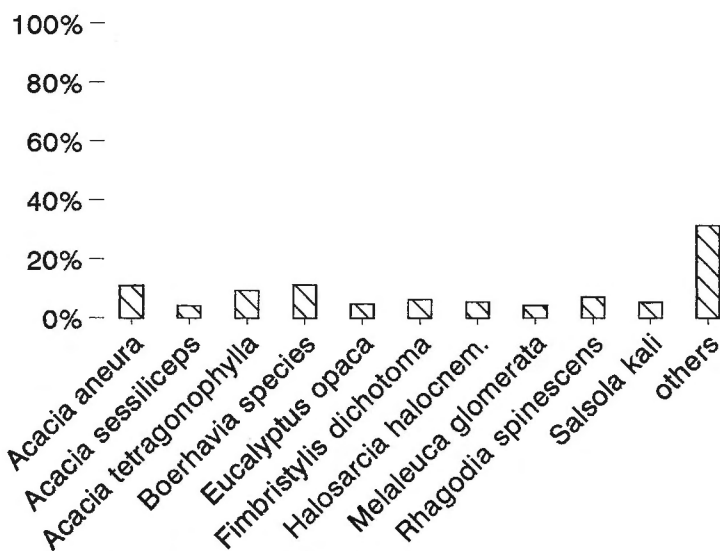


Fig. A4.29: main food plants in March 1989

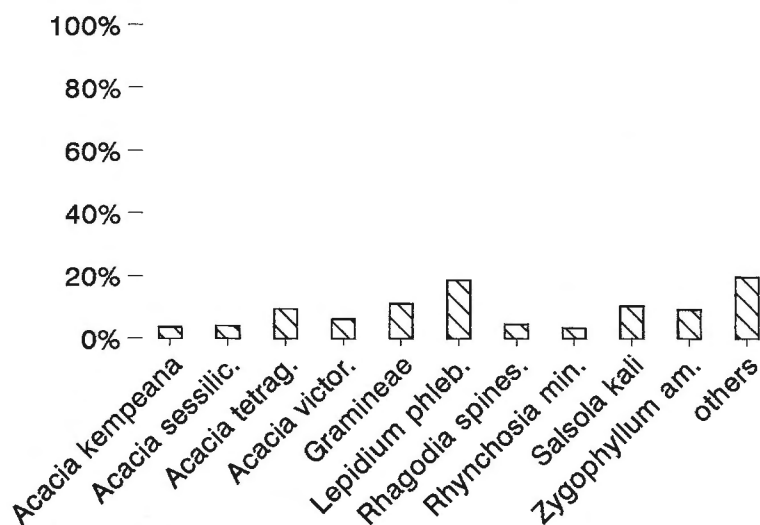


Fig. A4.30: main food plants in April 1989

Fig. A4.28-30: main food plants from February to April 1989



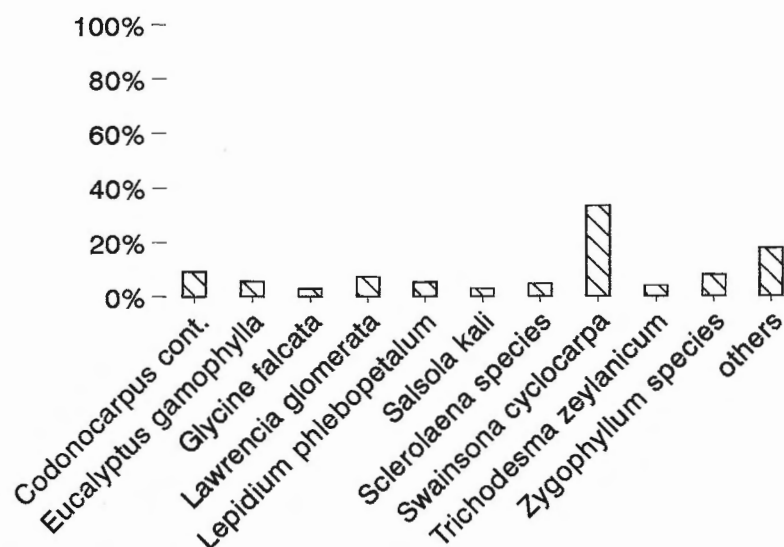


Fig. A4.31: main food plants in May 1989

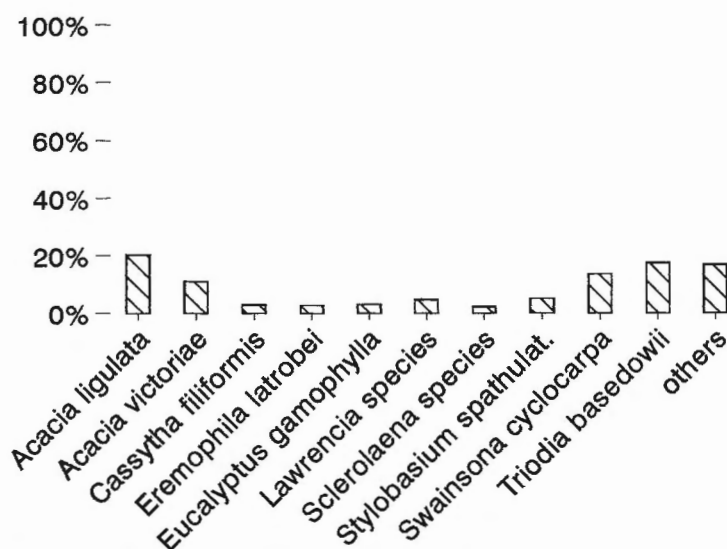


Fig. A4.32: main food plants in June 1989

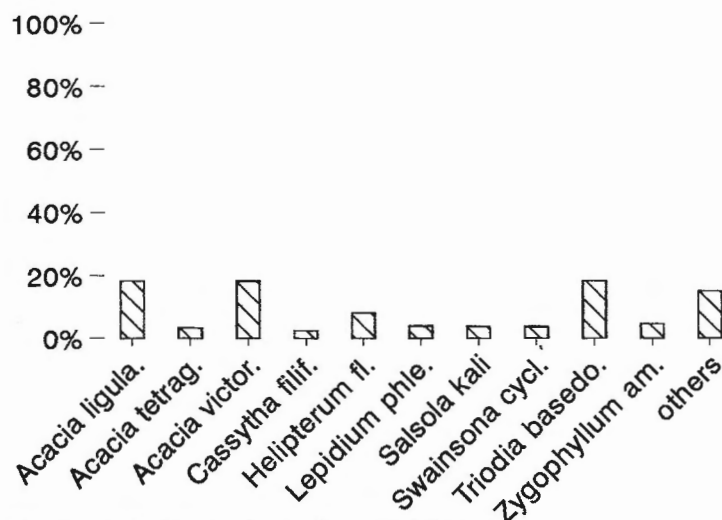


Fig. A4.33: main food plants in July 1989

Fig. A4.31-33: main food plants from May to July 1989

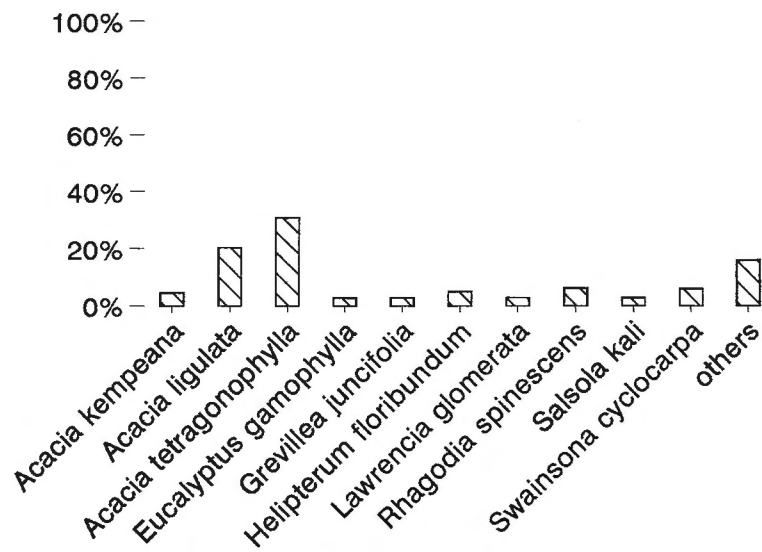


Fig. A4.34: main food plants in August 1989

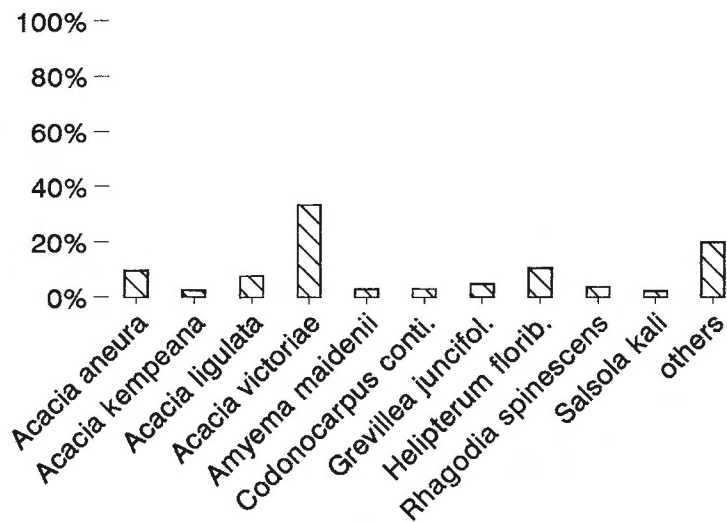


Fig. A4.35: main food plants in September 1989

Fig. A4.34-35: main food plants from Aug. to Sept. 1989

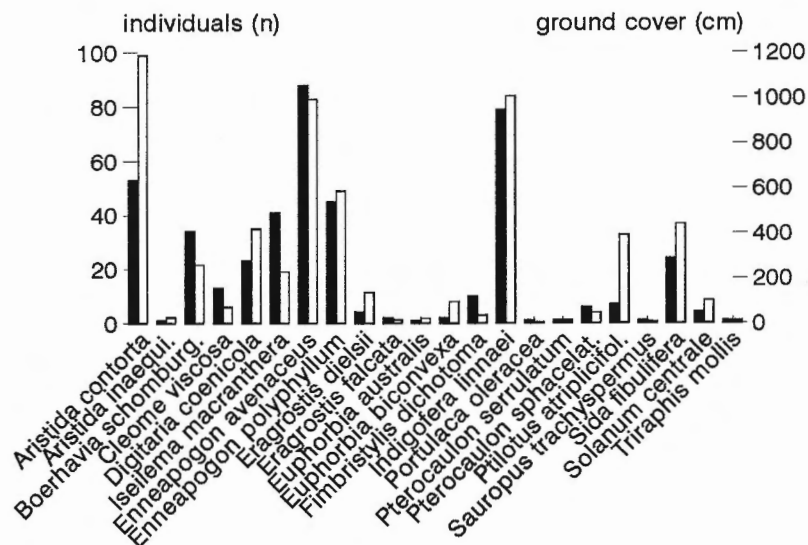


Fig. A5.1a: 11.01.89, total ground cover: 61%

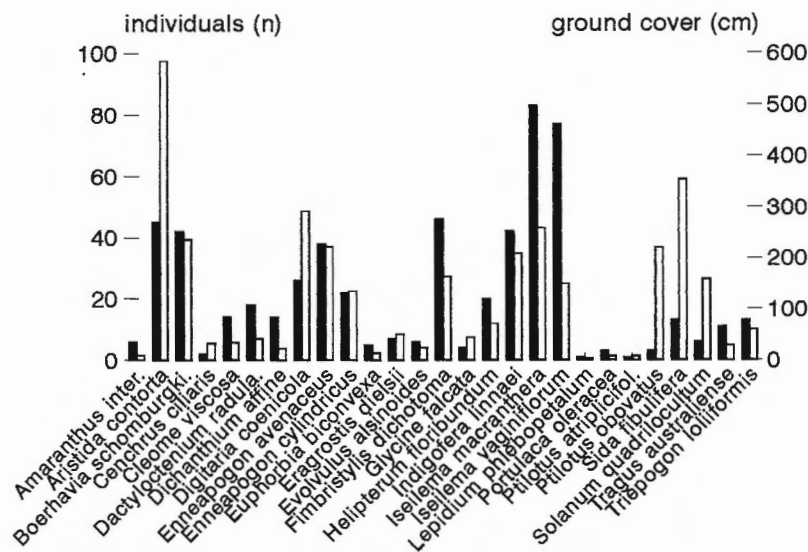


Fig. A5.1b: 01.05.89, total ground cover: 34,4%

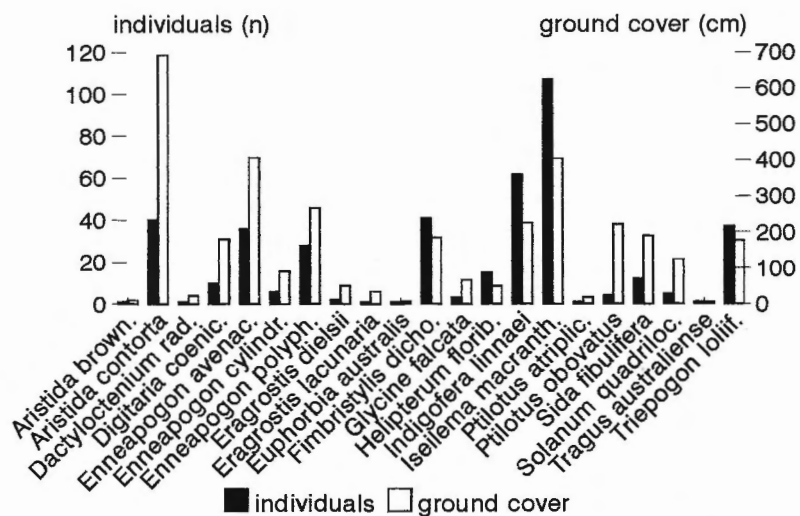


Fig. A5.1c: bushland, H12, 01.09.89, total ground cover: 34,3%

Fig. A5.1a-c: analysis of ground-vegetation from permanent transect 1

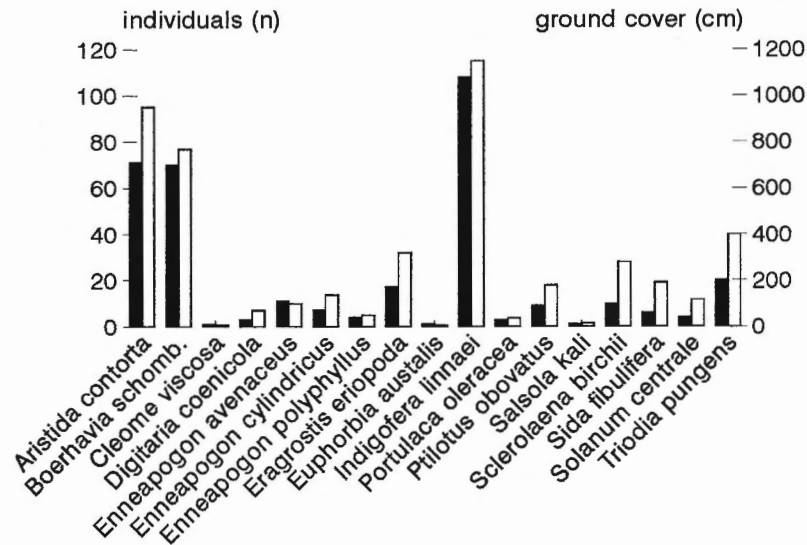


Fig. A5.2a: 12.01.89, total ground cover: 47,7%

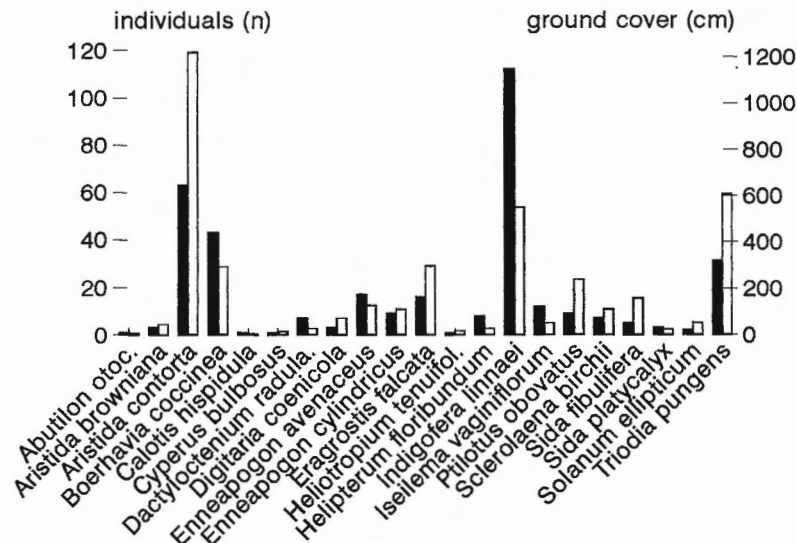


Fig. A5.2b: 28.04.89, total ground cover: 40,6%

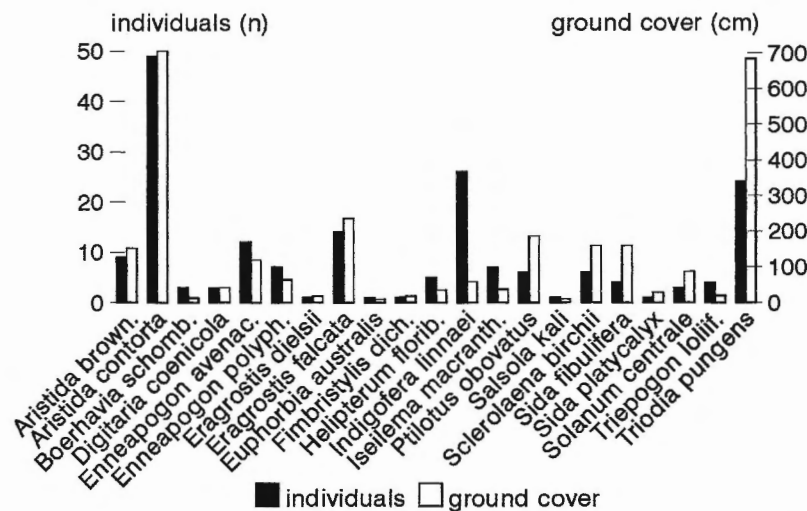


Fig. A5.2c: bushland, G3, 31.08.89, total ground cover: 28,5%

Fig. A5.2a-c: analysis of ground-vegetation from permanent transect 2

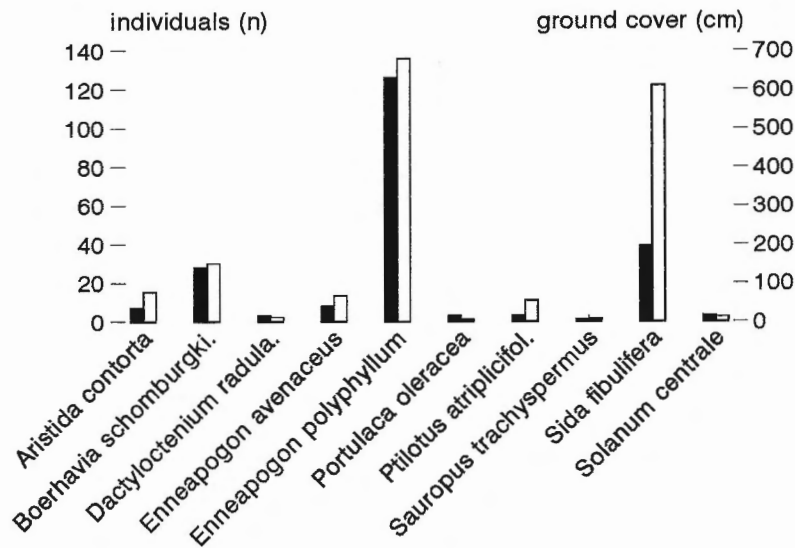


Fig. A5.3a: 13.01.89, total ground cover: 16,7%

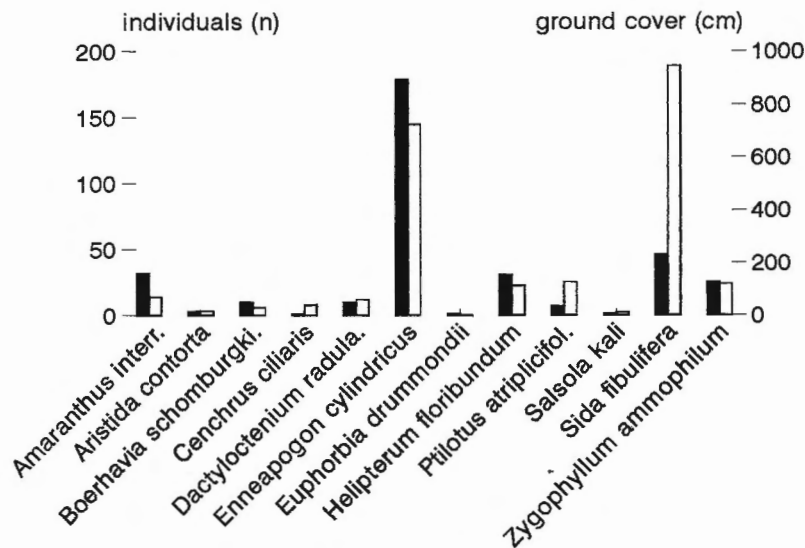


Fig. A5.3b: 28.04.89, total ground cover: 22,5%

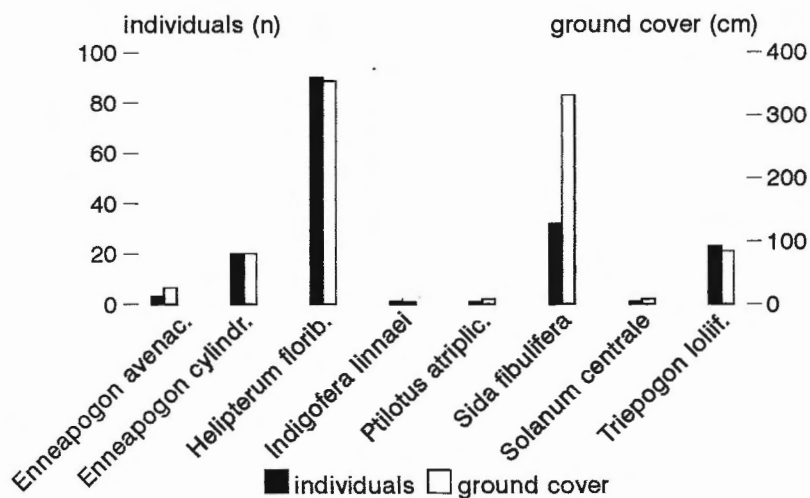


Fig. A5.3c: bushland, G3, 01.09.89, total ground cover: 9%

Fig. A5.3a-c: analysis of ground-vegetation from permanent transect 3

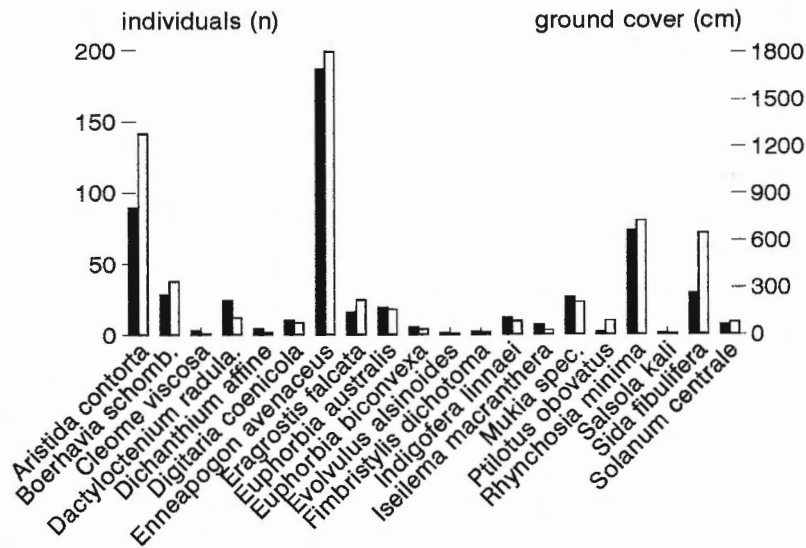


Fig. A5.4a: 10.01.89, total ground cover: 59,4%

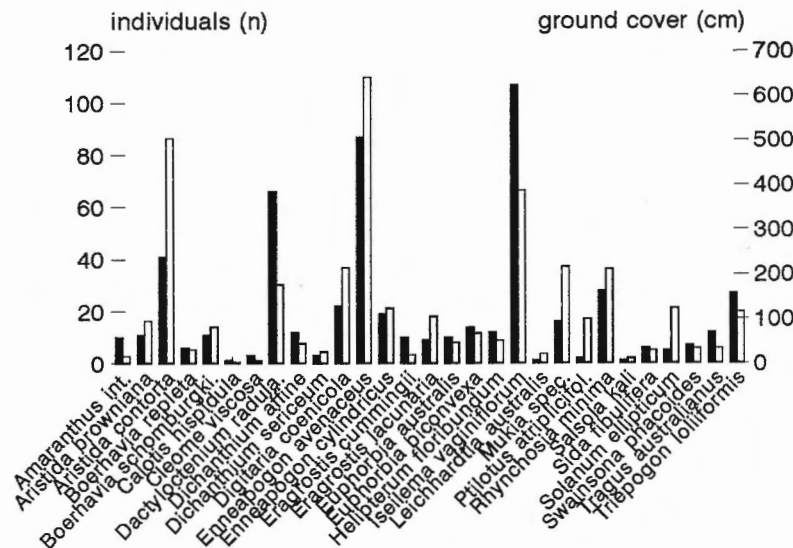


Fig. A5.4b: 01.05.89, total ground cover: 35,4%

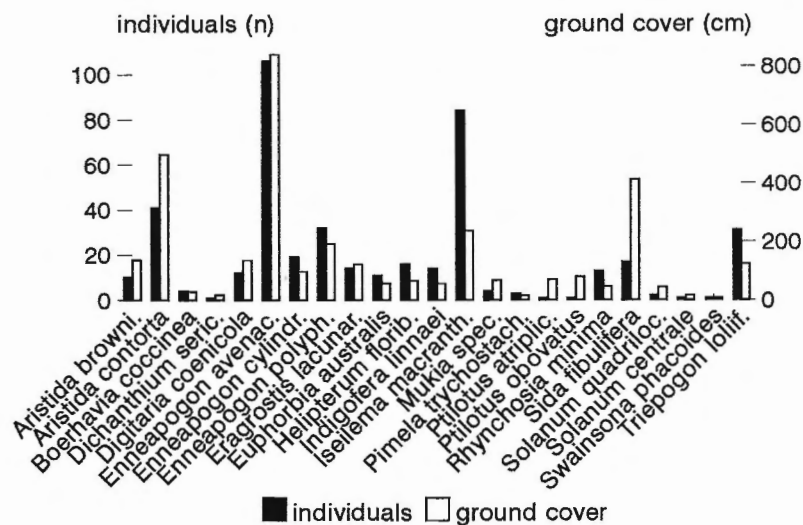


Fig. A5.4c: open plain, G19, 01.09.89, total ground cover: 33,7%

Fig. A5.4a-c: analysis of ground-vegetation from permanent transect 4

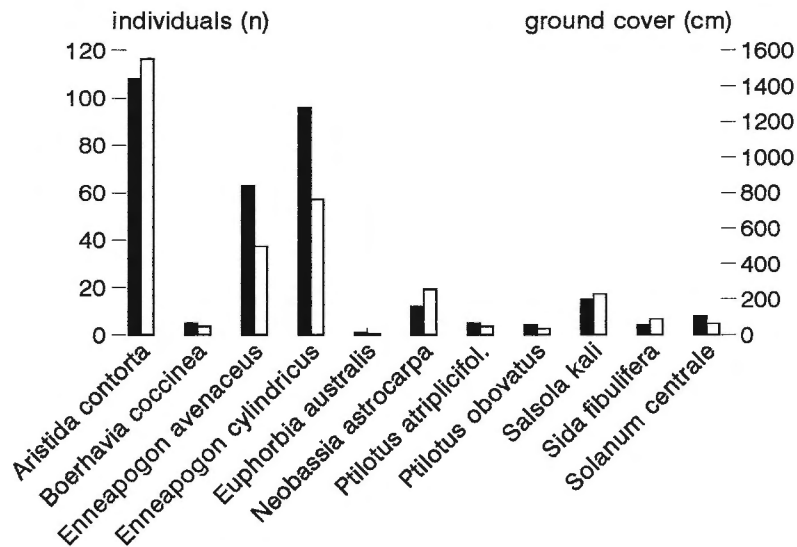


Fig. A5.5a: 11.01.89, total ground cover: 35,8%

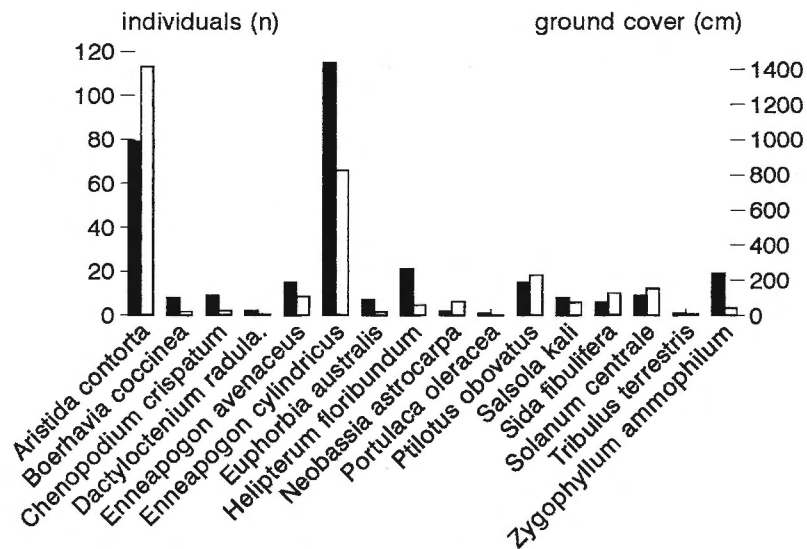


Fig. A5.5b: 29.04.89, total ground cover: 31,8%

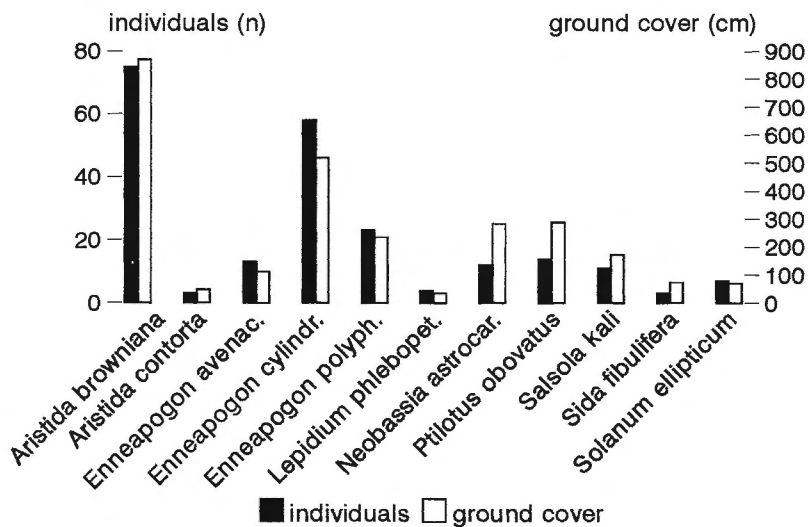


Fig. A5.5c: open plain, F5, 31.08.89, total ground cover: 27%

Fig. A5.5a-c: analysis of ground-vegetation from permanent transect 5

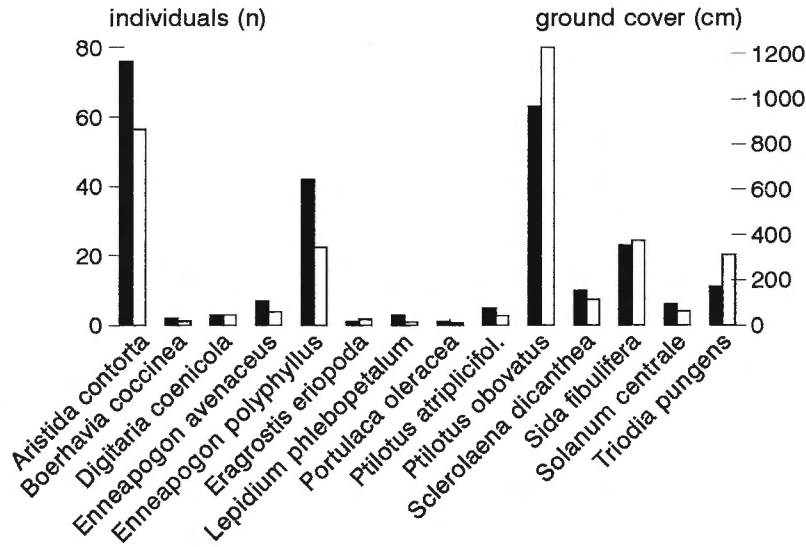


Fig. A5.6a: 12.01.89, total ground cover: 35,1%

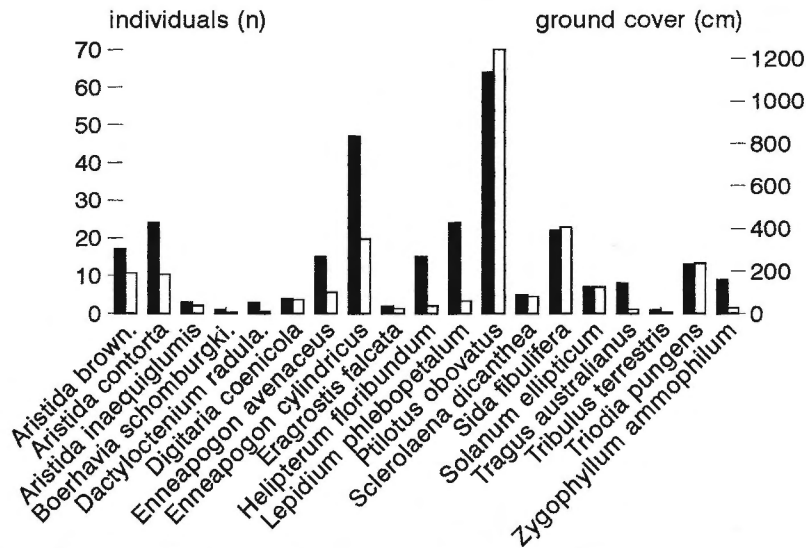


Fig. A5.6b: 29.04.89, total ground cover: 32,1%

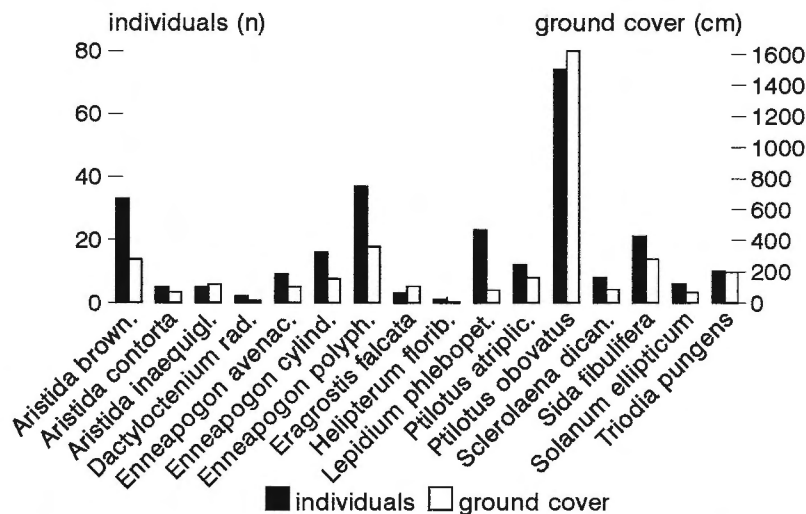


Fig. A5.6c: open plain, G7, 31.08.89, total ground cover: 36,9%

Fig. A5.6a-c: analysis of ground-vegetation from permanent transect 6



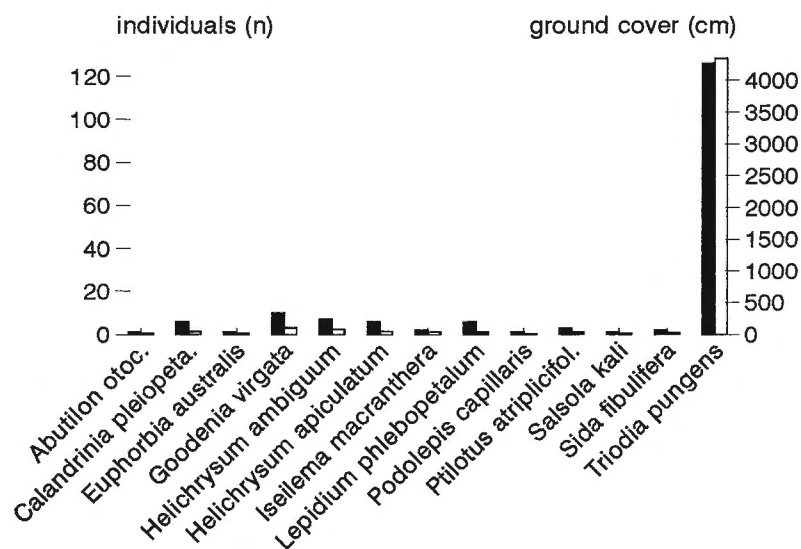


Fig. A5.7a: 10.01.89, total ground cover: 48,4%

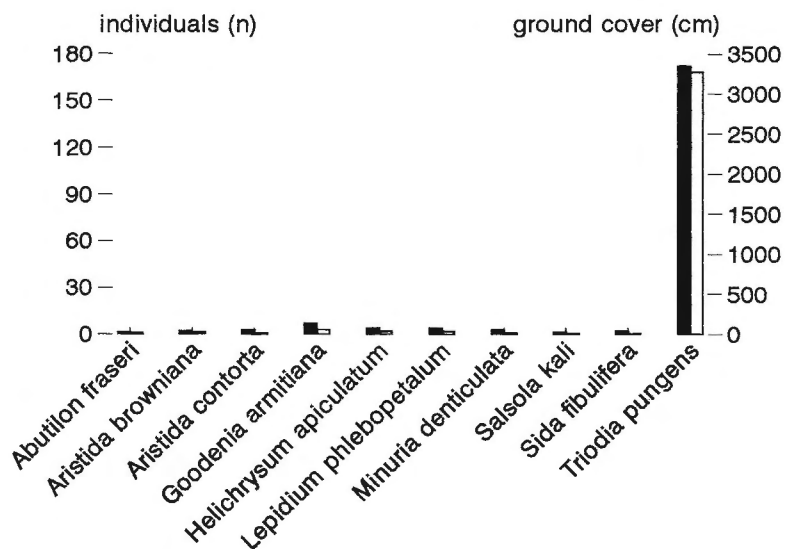


Fig. A5.7b: 28.04.89, total ground cover: 34,9%

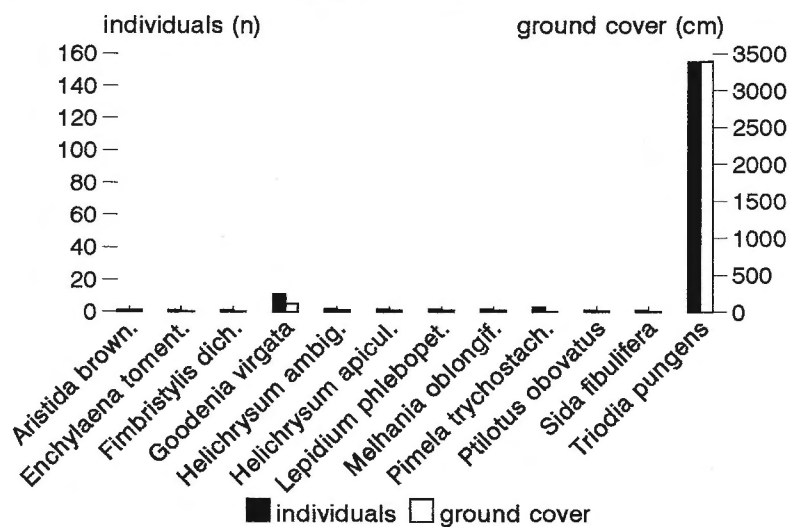


Fig. A5.7c: sandplain/dunes, E3, 31.08.89, total ground cover: 36,3%  
 Fig. A5.7a-c: analysis of ground-vegetation from permanent transect 7

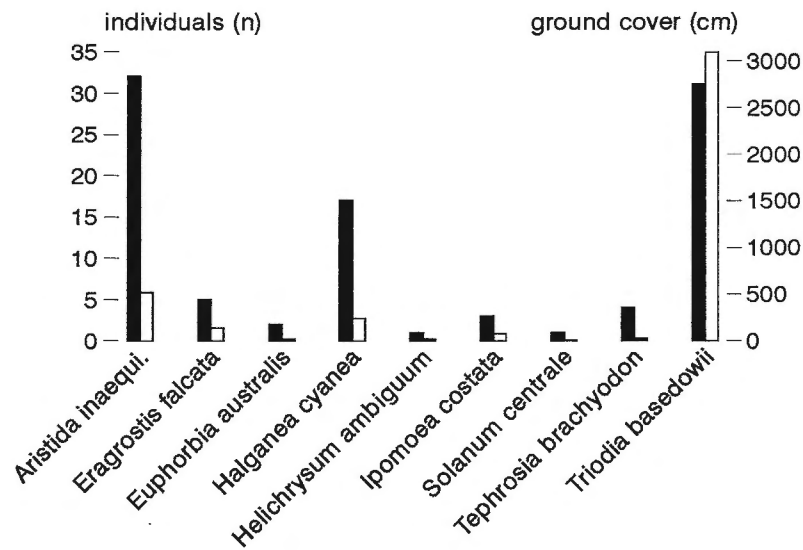


Fig. A5.8a: 12.01.89, total ground cover: 41,2%

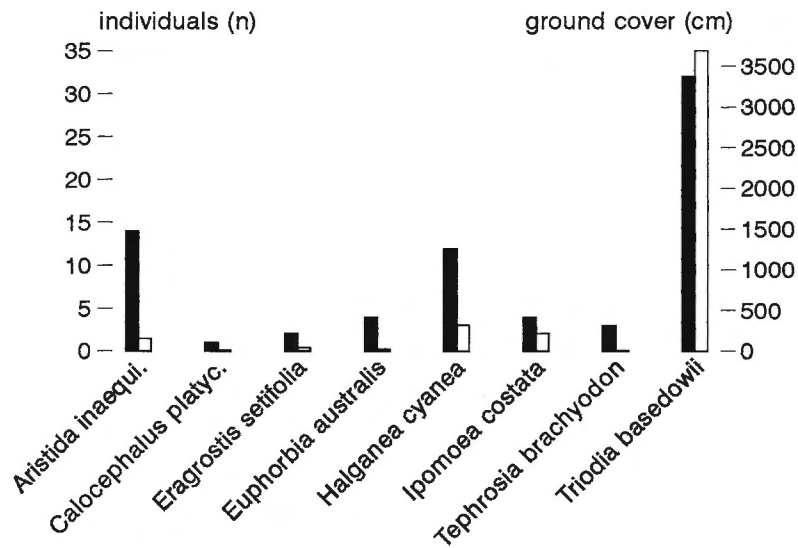


Fig. A5.8b: 28.04.89, total ground cover: 44,6%

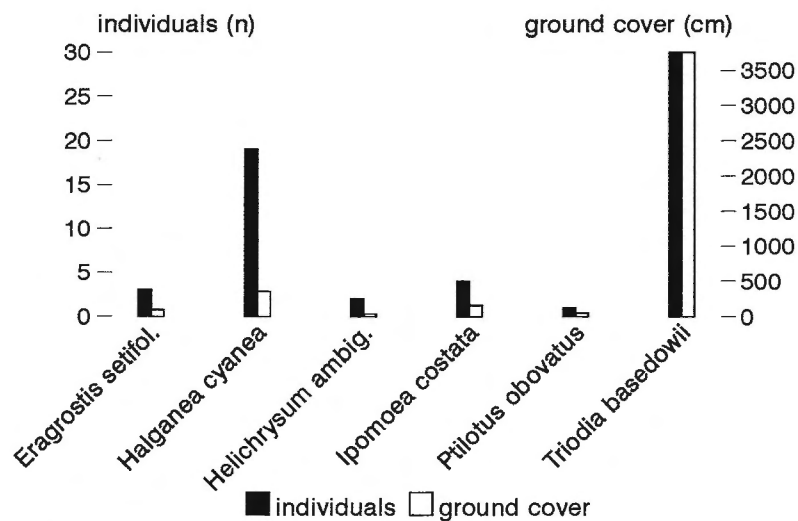


Fig. A5.8c: sandplain/dunes, M7, 01.09.89, total ground cover: 44,4%

Fig. A5.8a-c: analysis of ground-vegetation from permanent transect 8

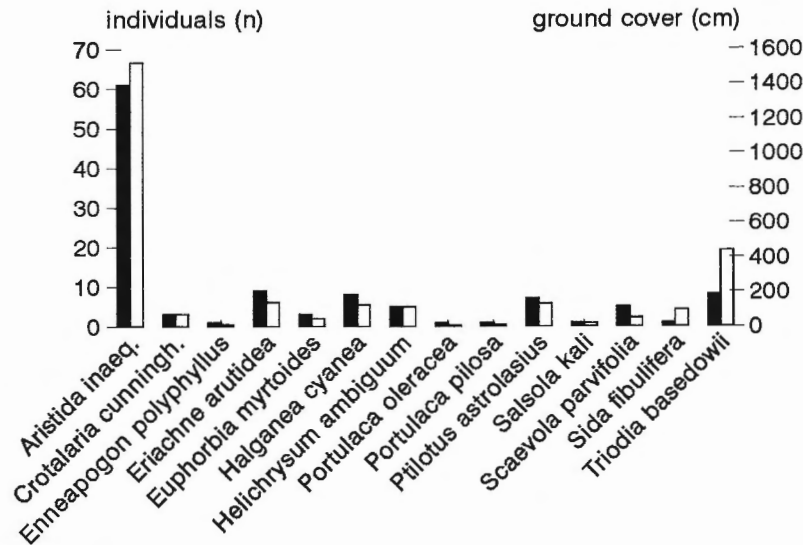


Fig. A5.9a: 12.01.89, total ground cover: 27,7%

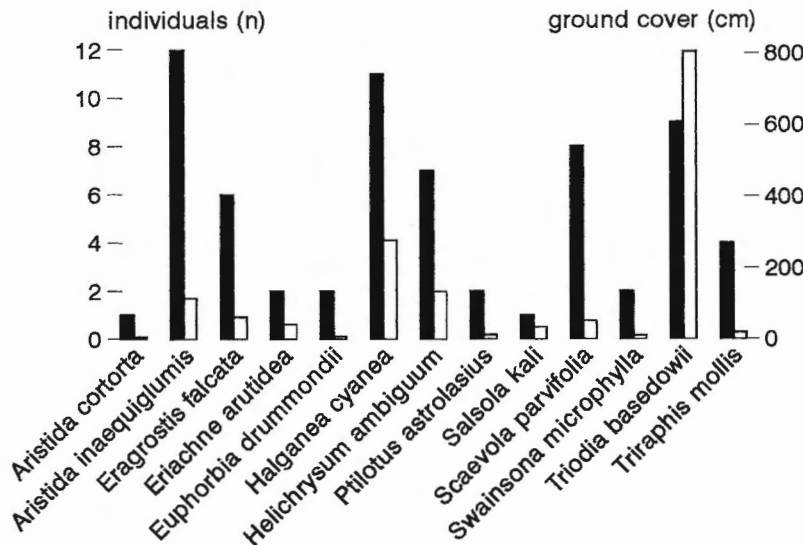


Fig. A5.9b: 01.05.89, total ground cover: 15,8%

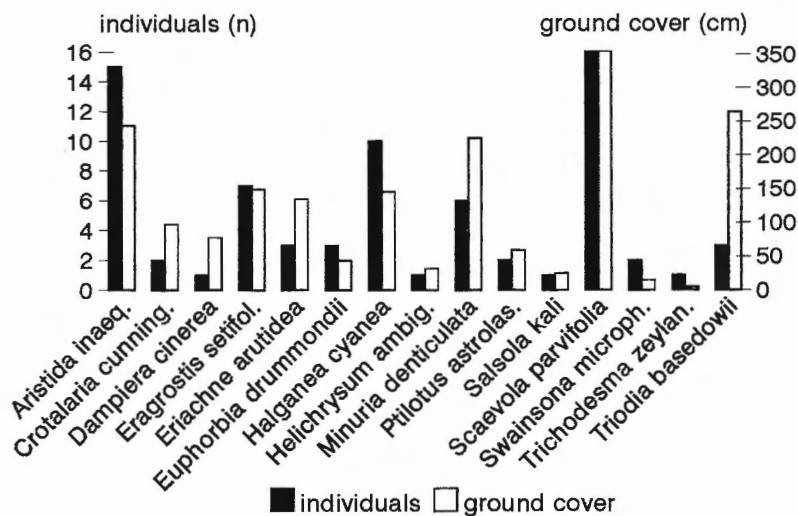


Fig. A5.9c: sandplain/dunes, N8, 01.09.89, total ground cover: 18,7%

Fig. A5.9a-c: analysis of ground-vegetation from permanent transect 9

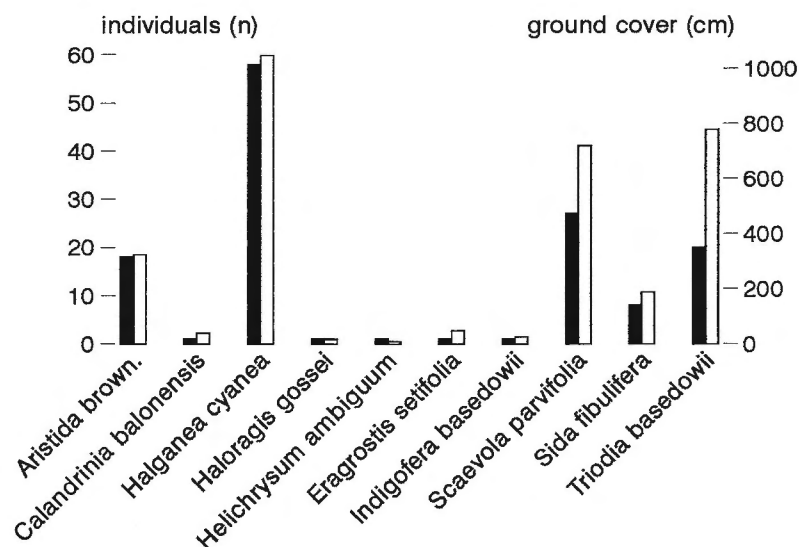


Fig. A5.10a: 12.01.89, total ground cover: 32%

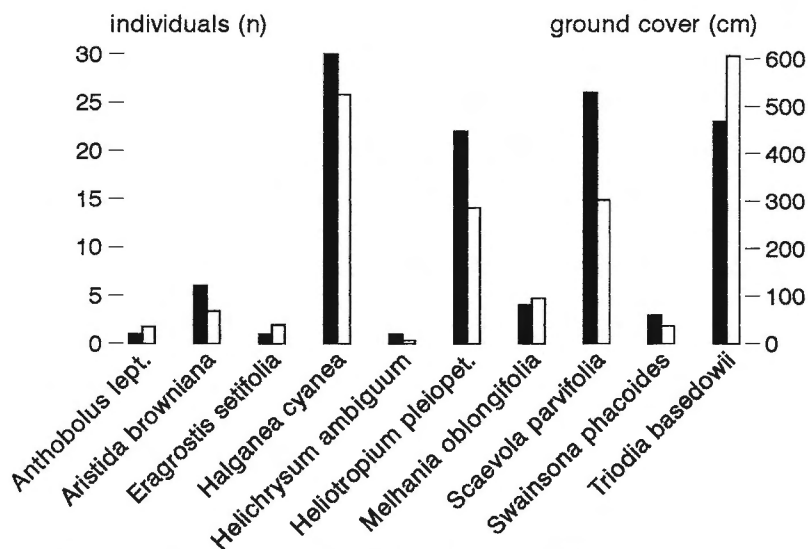


Fig. A5.10b: 01.05.89, total ground cover: 20%

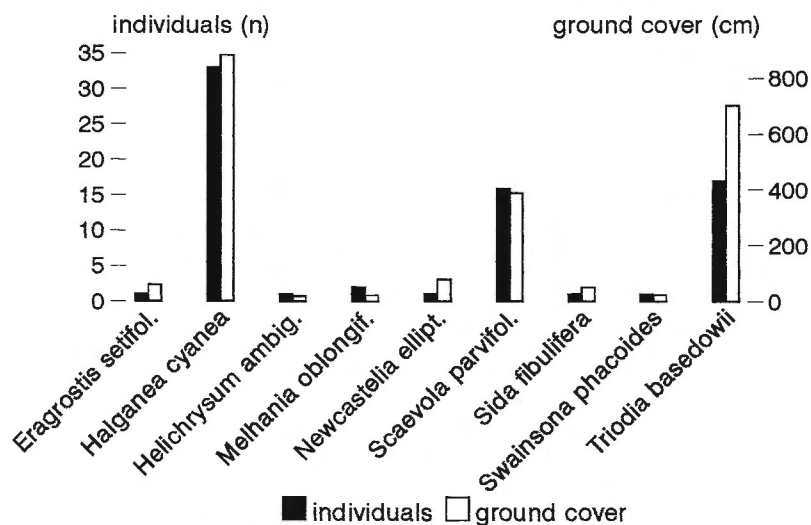


Fig. A5.10c: sandplain/dunes, N11, 01.09.89, total ground cover: 22,3%  
Fig. A5.10a-c: analysis of ground-vegetation from permanent transect 10

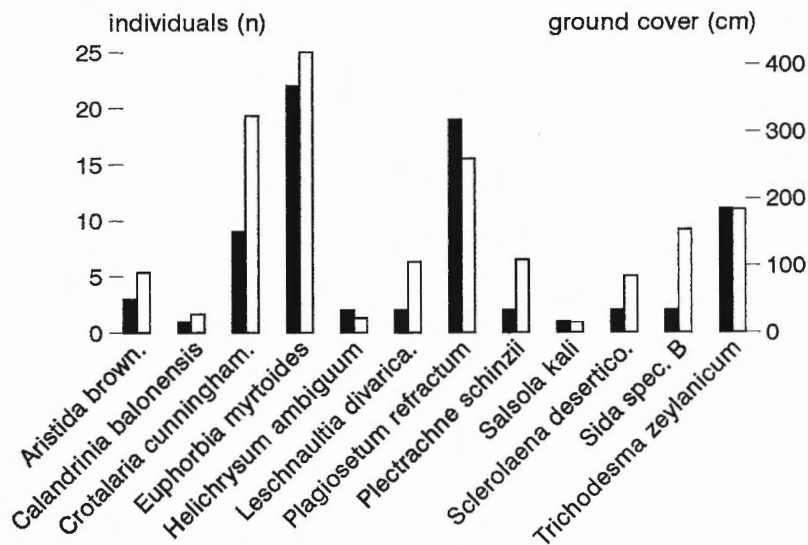


Fig. A5.11a: 13.01.89, total ground cover: 18%

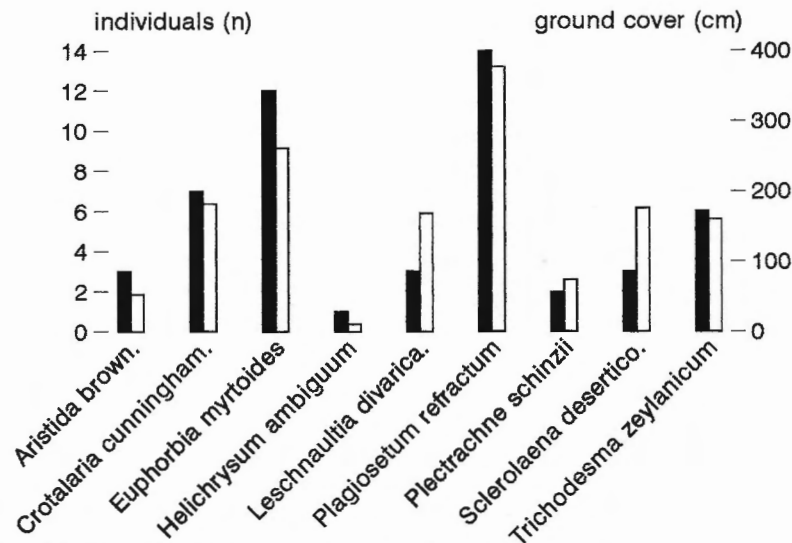


Fig. A5.11b: 29.04.89, total ground cover: 14,6%

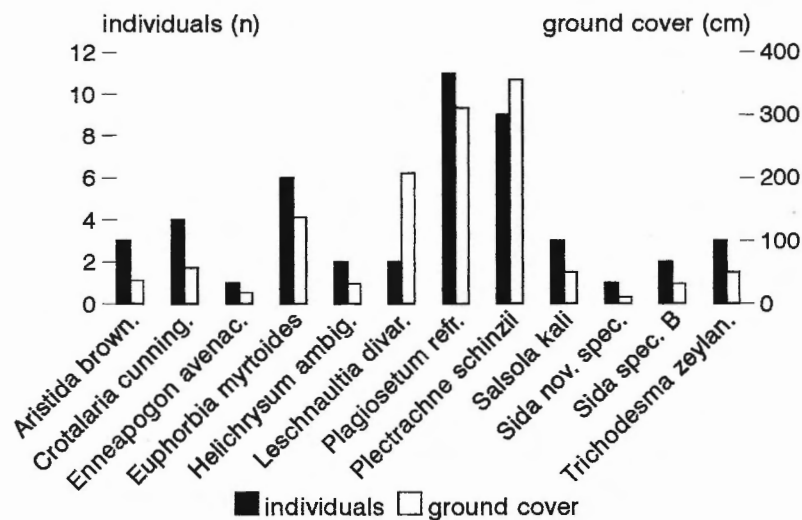


Fig. A5.11c: sandplain/dunes, D7, 31.08.89, total ground cover: 13%

Fig. A5.11a-c: analysis of ground-vegetation from permanent transect 11

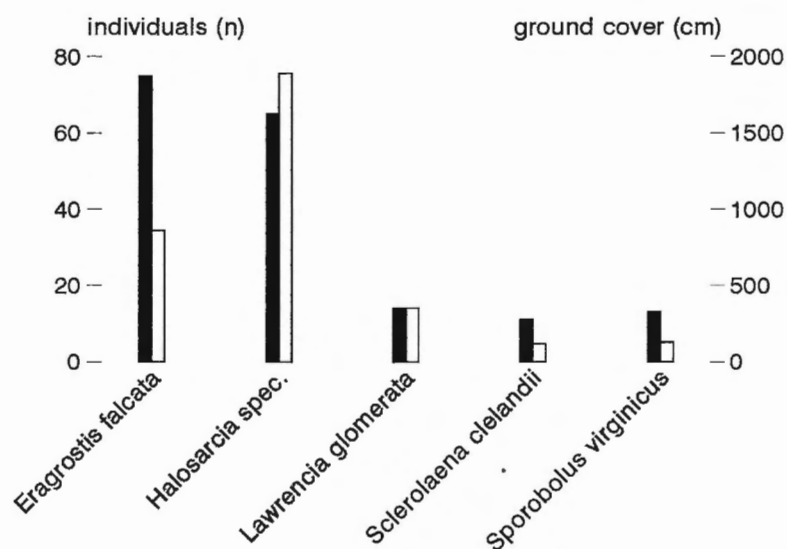


Fig. A5.12a: 12.01.89, total ground cover: 33,5%

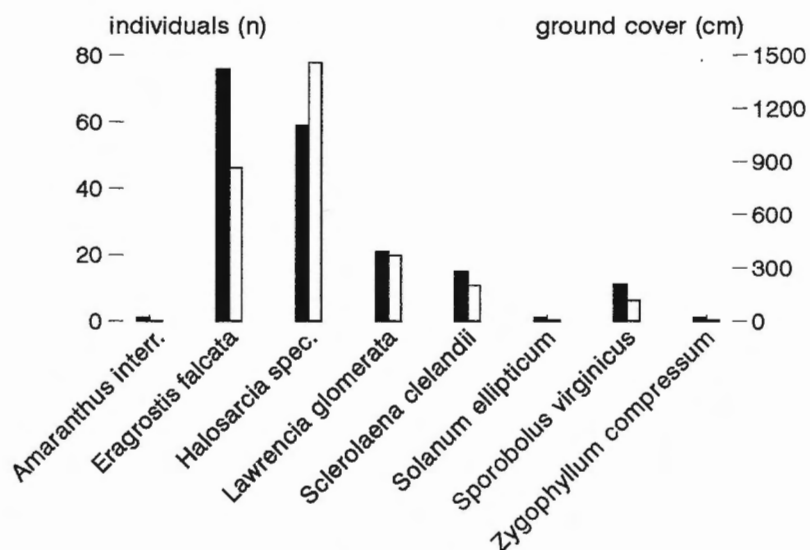


Fig. A5.12b: 29.04.89, total ground cover: 30,3%

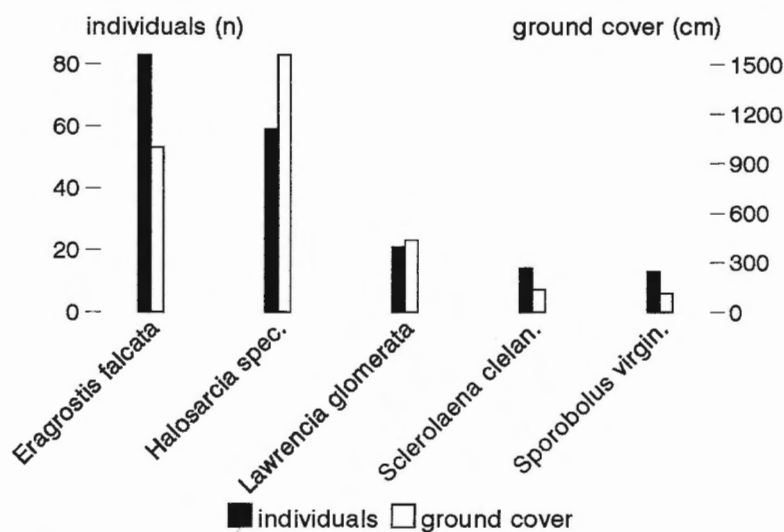


Fig. A5.12c: saltmarsh, D8, 31.08.89, total ground cover: 32,5%

Fig. A5.12a-c: analysis of ground-vegetation from permanent transect 12

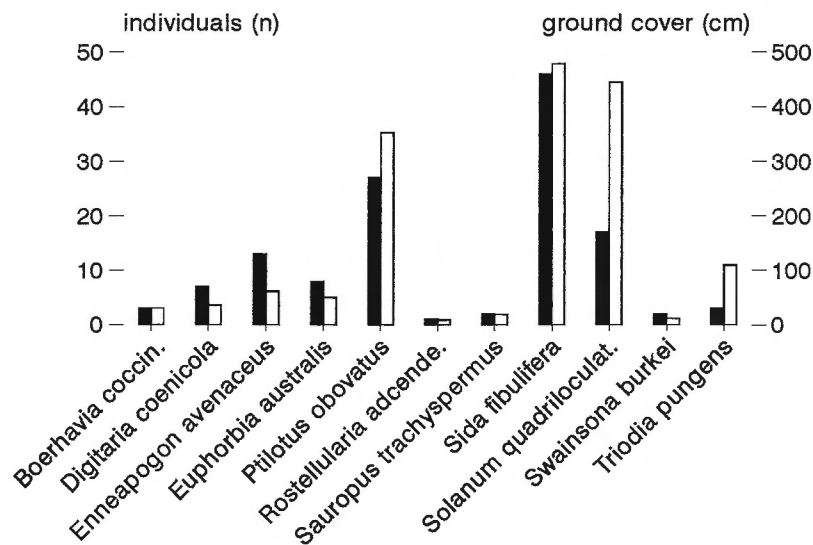


Fig. A6.1: bushland, G20, 27.11.87, total ground cover: 16,1%

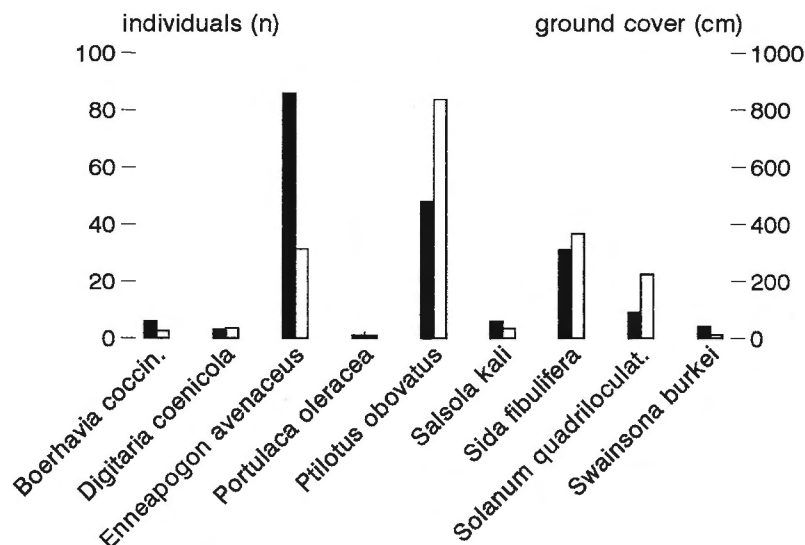


Fig. A6.2: bushland, G20, 27.11.87, total ground cover: 18,6%

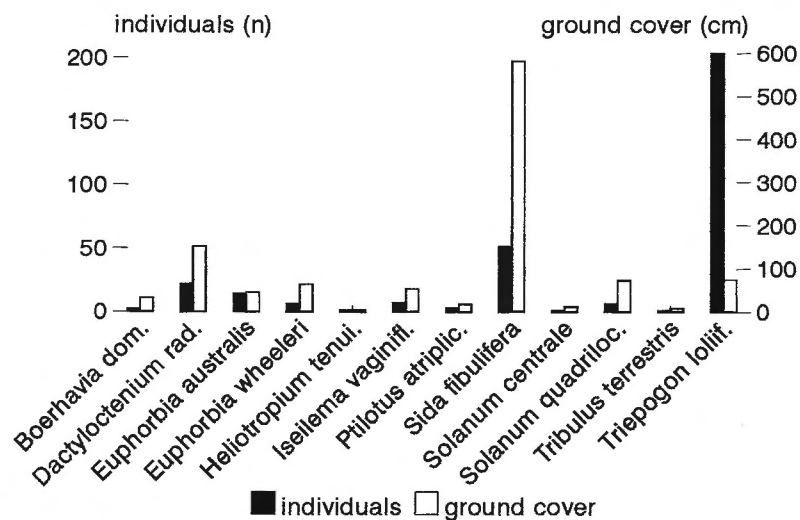


Fig. A6.3: bushland, H15, 30.11.87, total ground cover: 17,4%

Fig. A6.1-3: analysis of ground-vegetation from random samples

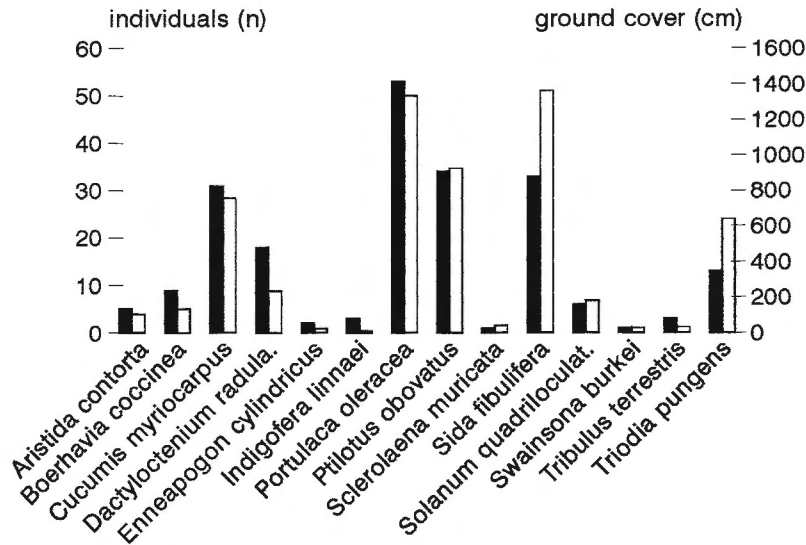


Fig. A6.4: bushland, G1, 27.01.88, total ground cover: 58%

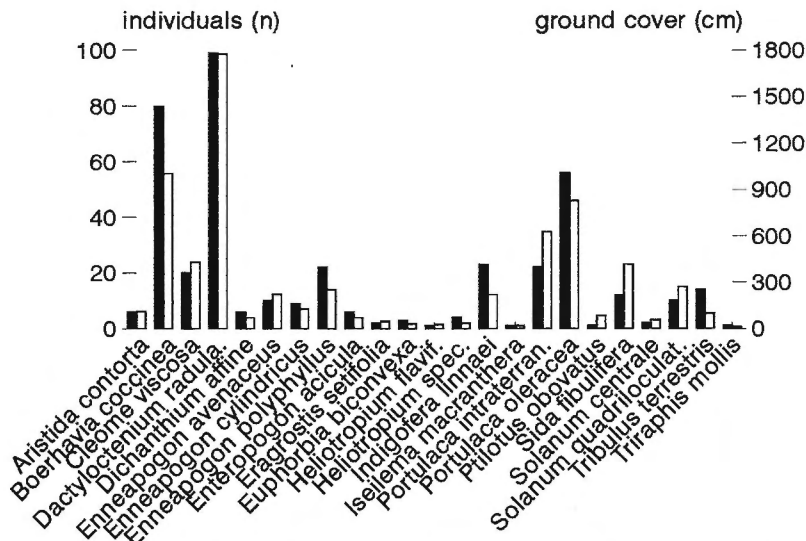


Fig. A6.5: bushland, J2, 27.01.88, total ground cover: 68,3%

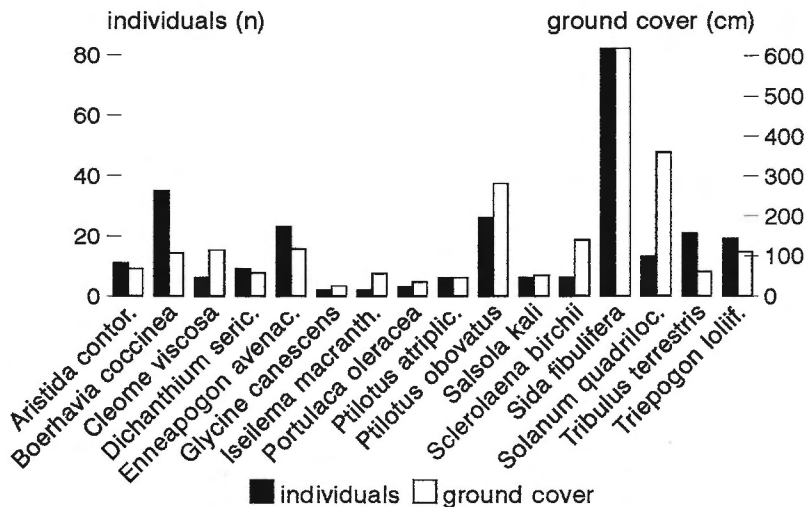


Fig. A6.6: bushland, H11, 07.03.88, total ground cover: 22,5%

Fig. A6.4-6: analysis of ground-vegetation from random samples



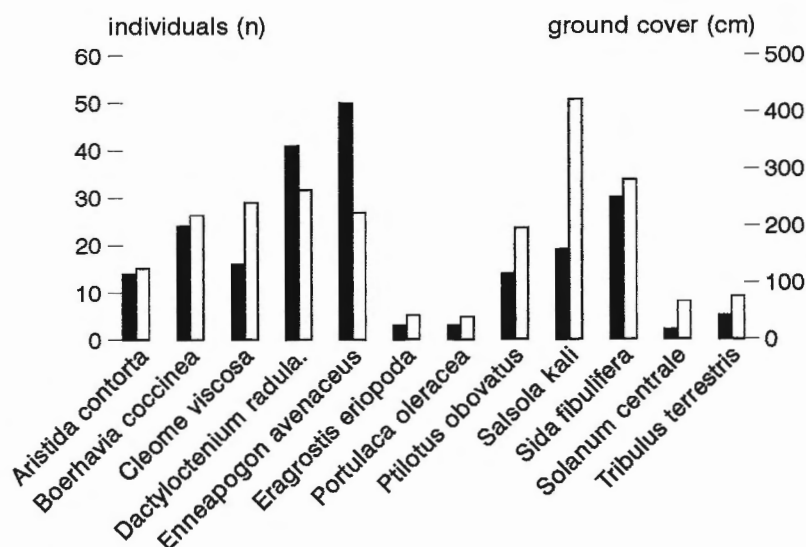


Fig. A6.7: bushland, H15, 08.03.88, total ground cover: 22%

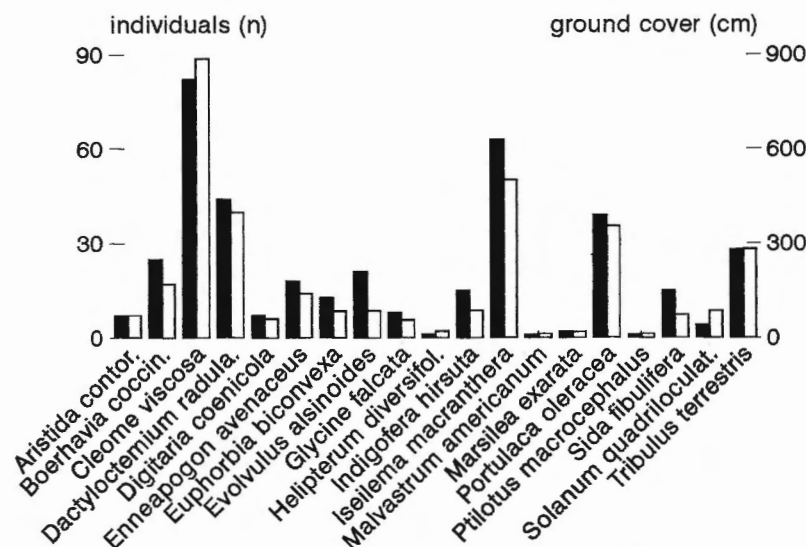


Fig. A6.8: bushland, G14, 08.03.88, total ground cover: 34%

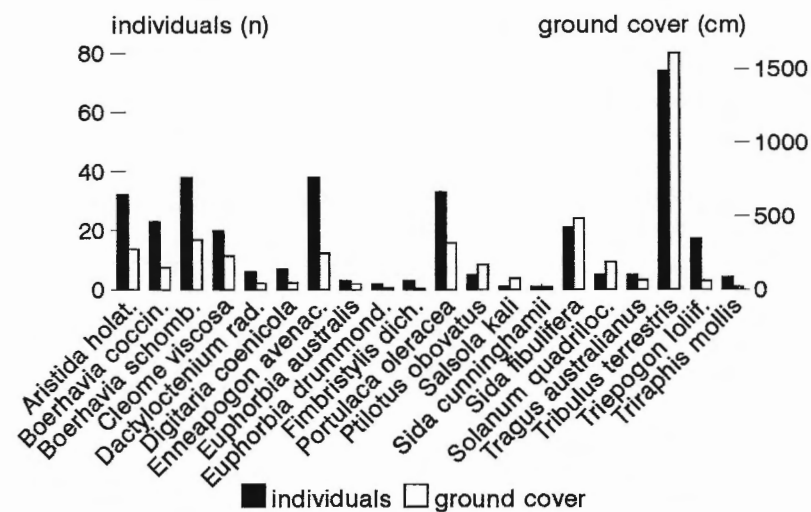


Fig. A6.9: bushland, G1, 20.04.88, total ground cover: 44%

Fig. A6.7-9: analysis of ground-vegetation from random samples

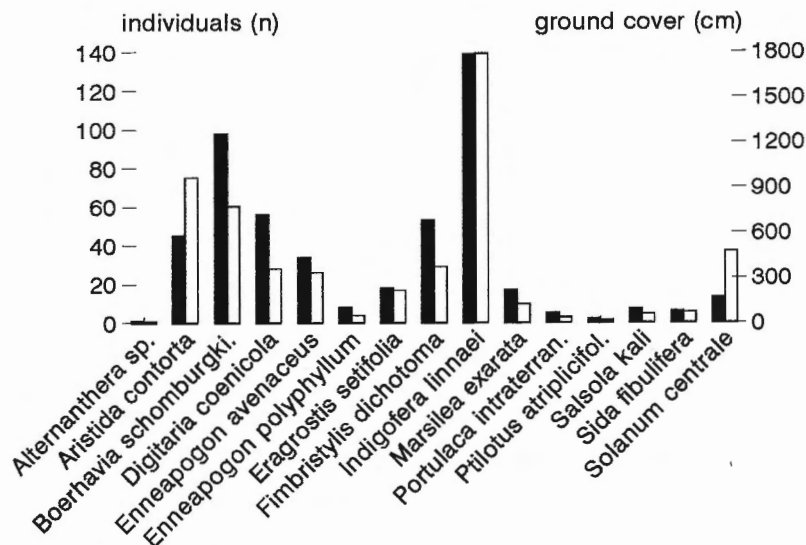


Fig. A6.10: bushland, J13, 16.12.88, total ground cover: 56,5%

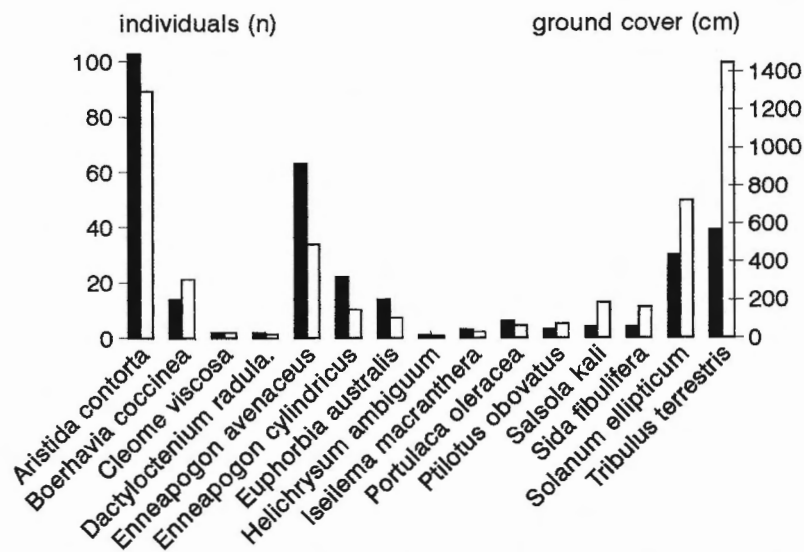


Fig. A6.11: open plain, E6, 19.04.88, total ground cover: 51%

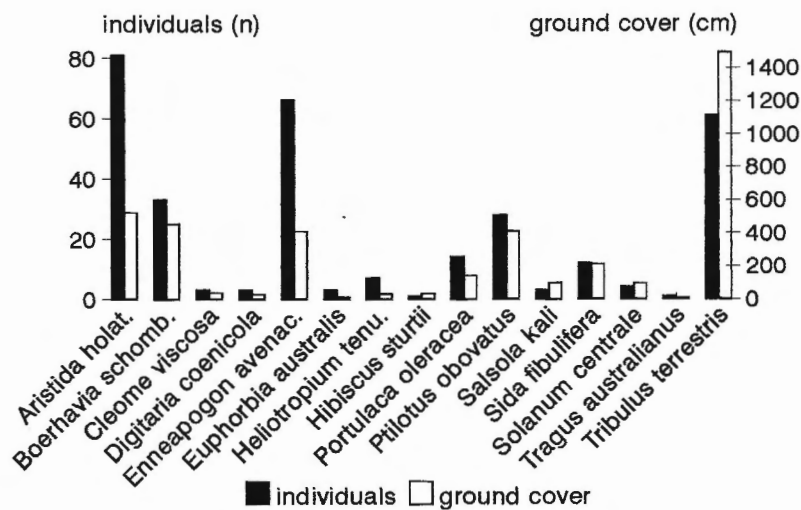


Fig. A6.12: open plain, L20, 19.04.88, total ground cover: 40%

Fig. A6.10-12: analysis of ground-vegetation from random samples

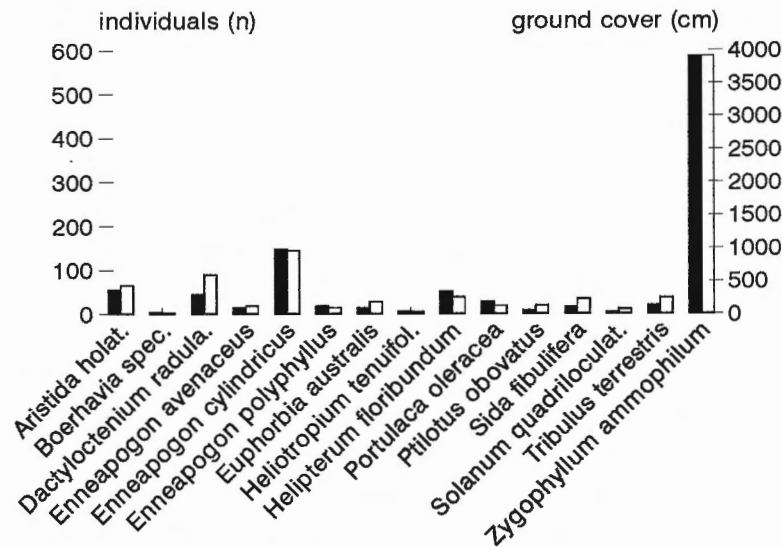


Fig. A6.13: open plain, J20, 25.05.88, total ground cover: 74%

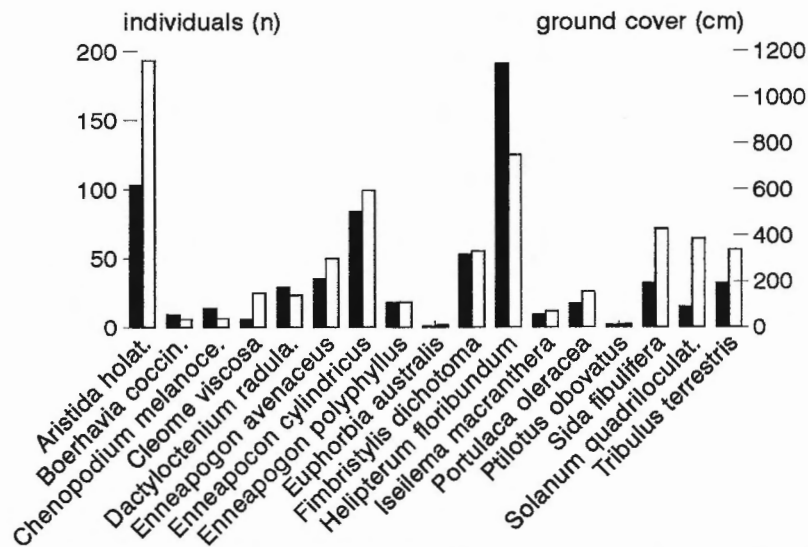
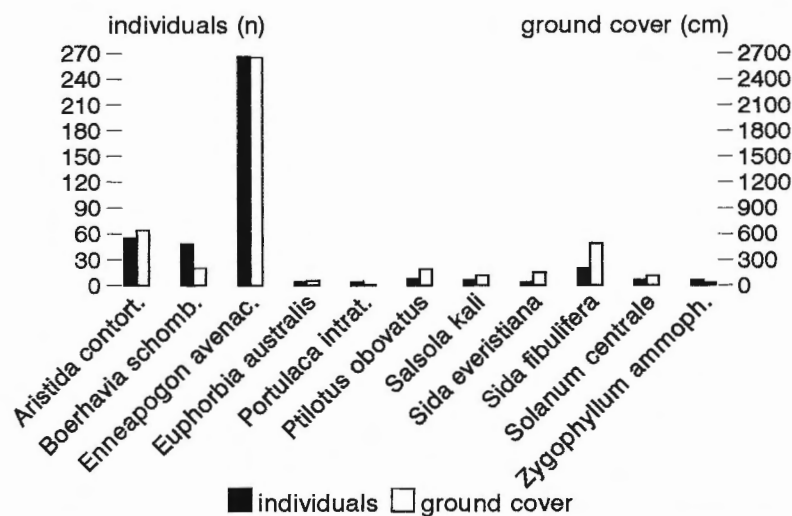


Fig. A6.14: open plain, BE2, 26.05.88, total ground cover: 50,2%



■ individuals □ ground cover

Fig. A6.15: open plain, H18, 16.12.88, total ground cover: 46,4%

Fig. A6.13-15: analysis of ground-vegetation from random samples

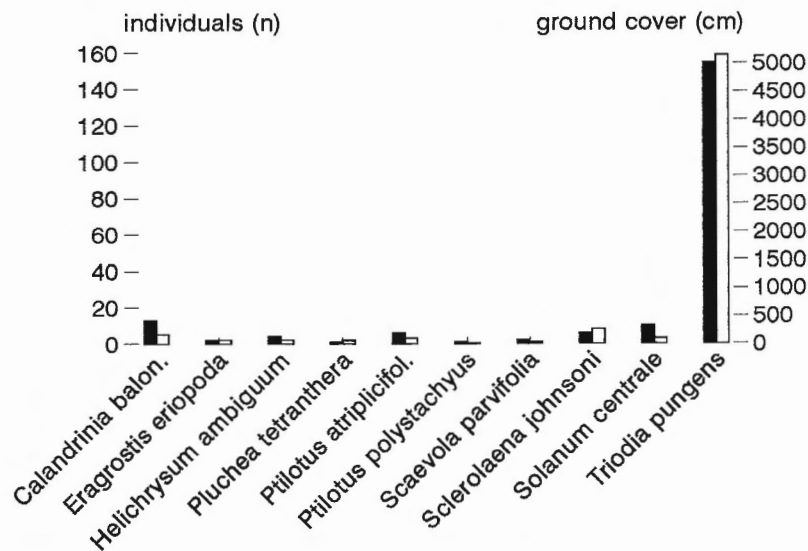


Fig. A6.16: sandplain/dunes, E11, 28.11.87, total ground cover: 60,2%

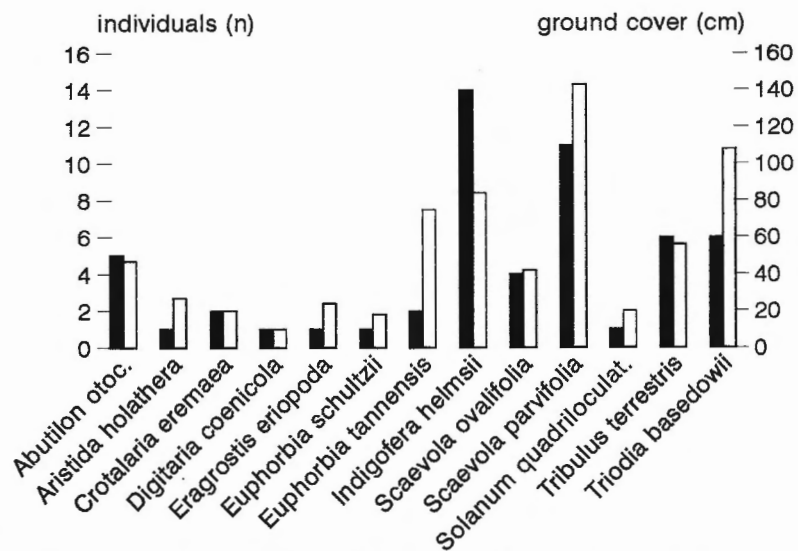


Fig. A6.17: sandplain/dunes, M10, 01.12.87, total ground cover: 6,7%

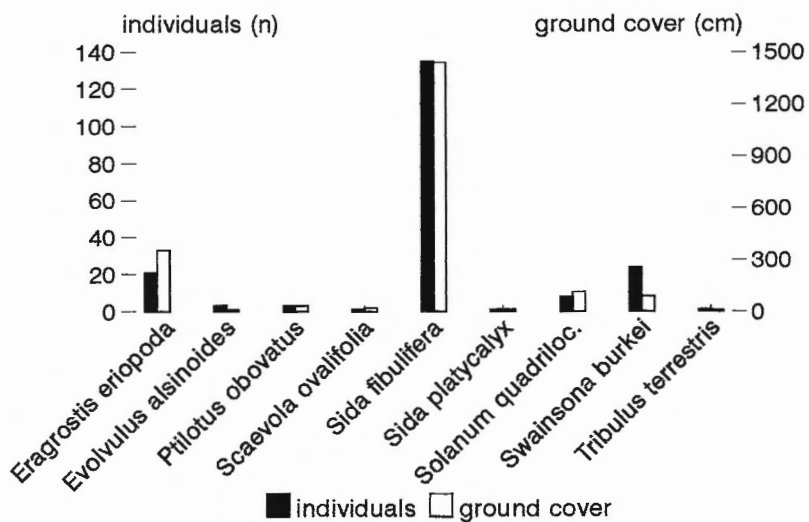


Fig. A6.18: sandplain/dunes, BH6, 02.12.87, total ground cover: 20,8%

Fig. A6.16-18: analysis of ground-vegetation from random samples

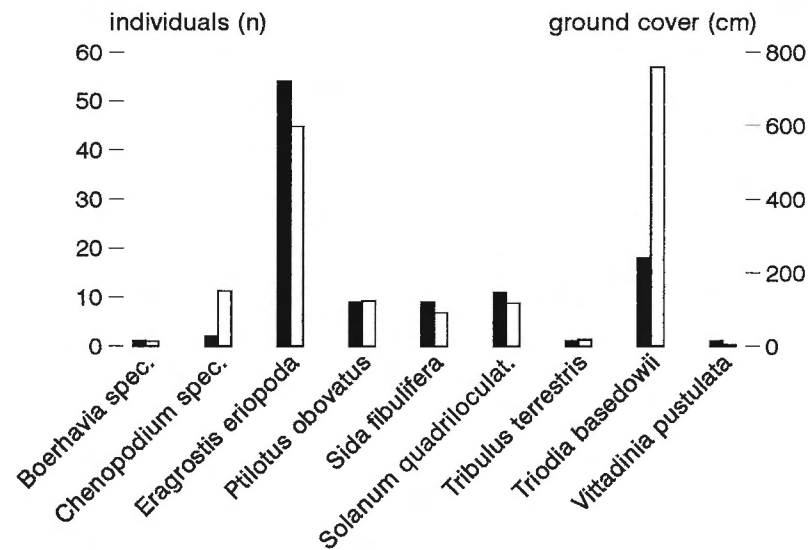


Fig. A6.19: sandplain/dunes, BL6, 02.12.87, total ground cover: 17,4%

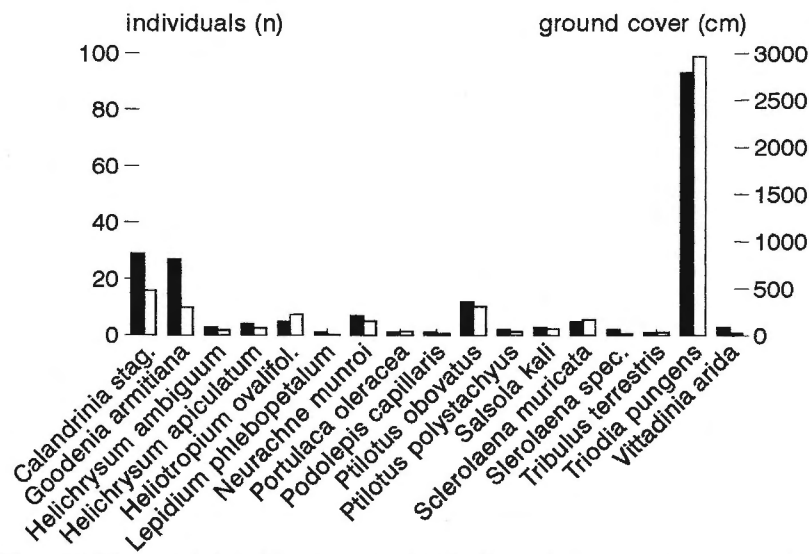


Fig. A6.20: sandplain/dunes, E3, 29.01.88, total ground cover: 49,7%

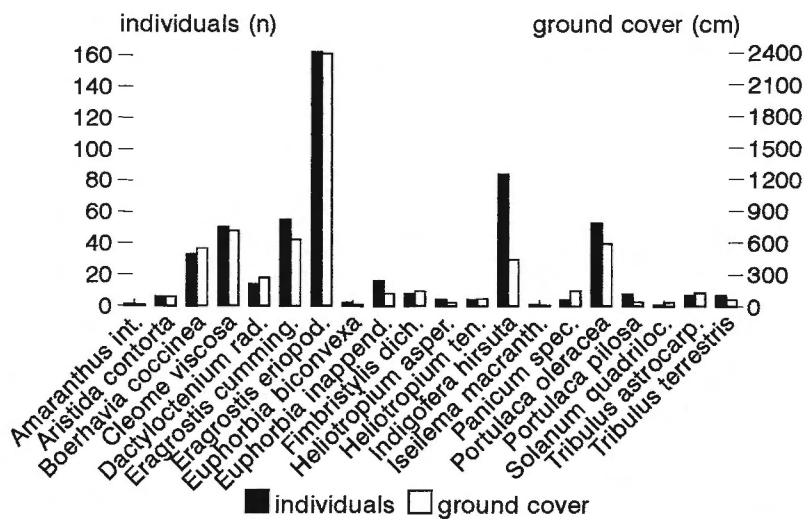


Fig. A6.21: sandplain/dunes, M11, 29.01.88, total ground cover: 64,4%  
Fig. A6.19-21: analysis of ground-vegetation from random samples

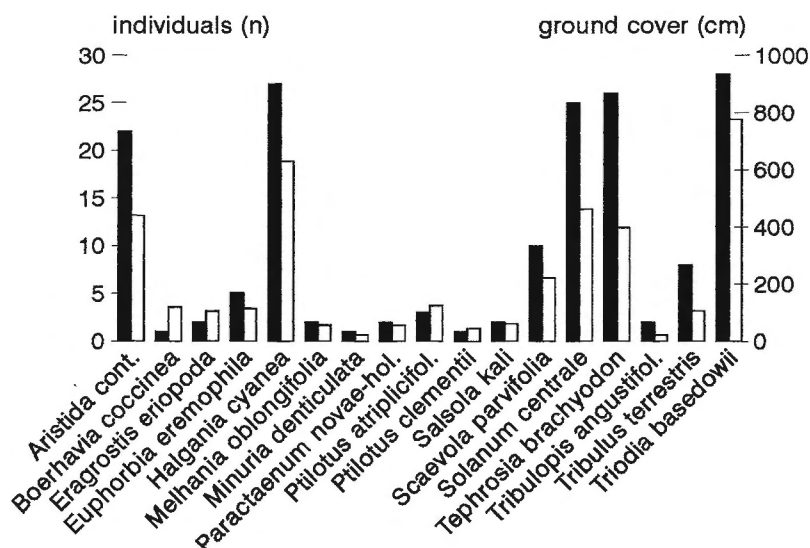


Fig. A6.22: sandplain/dunes, N10, 02.02.88, total ground cover: 37,5%

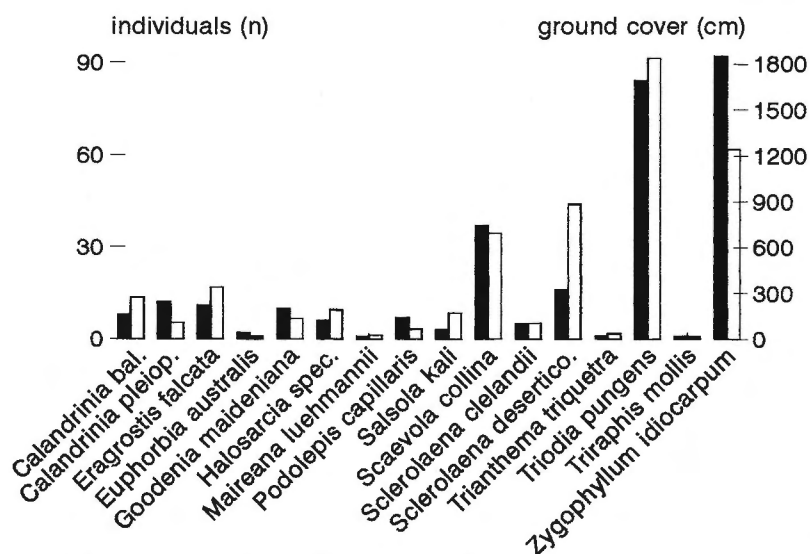
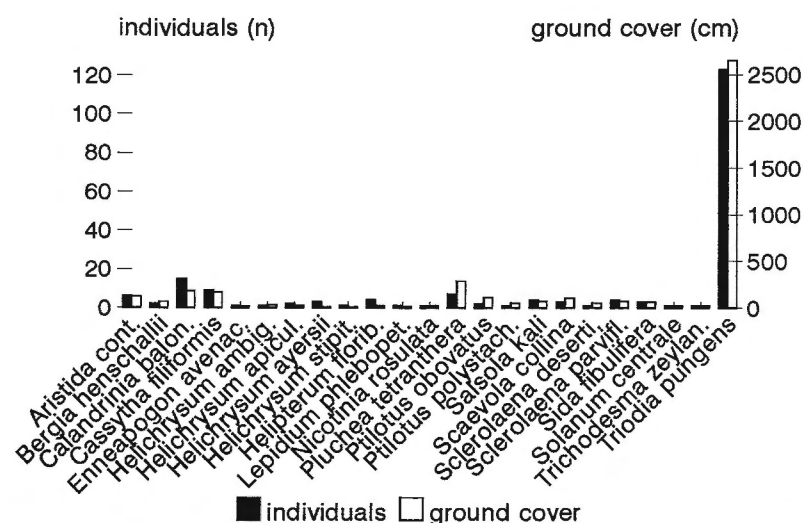


Fig. A6.23: sandplain/dunes, E10, 22.05.88, total ground cover: 61,5%

Fig. A6.24: sandplain/dunes, G7, 10.09.88, total ground cover: 46,4%  
Fig. A6.22-24: analysis of ground-vegetation from random samples

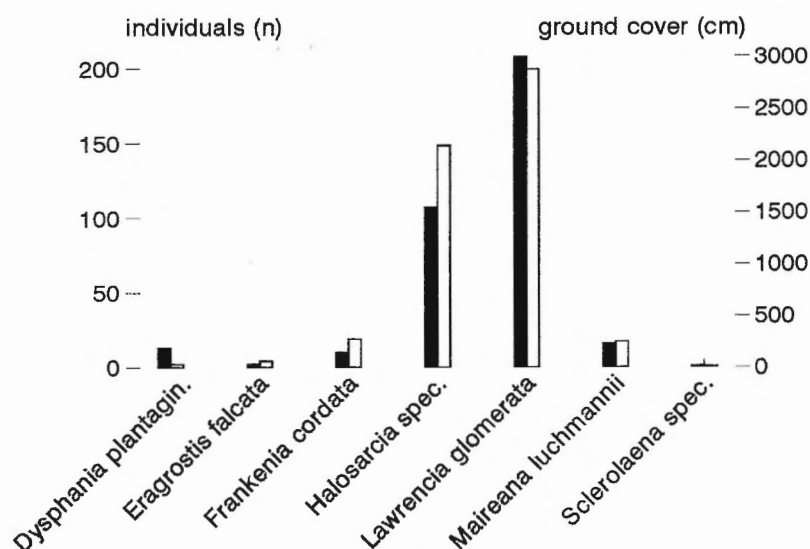


Fig. A6.25: saltmarsh, E5, 22.05.88, total ground cover: 56,4%

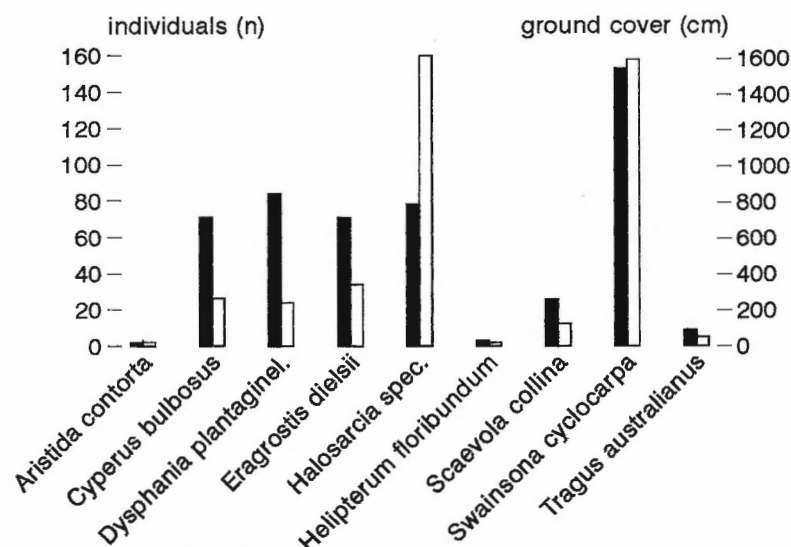


Fig. A6.26: saltmarsh, C20, 27.05.88, total ground cover: 42,8%

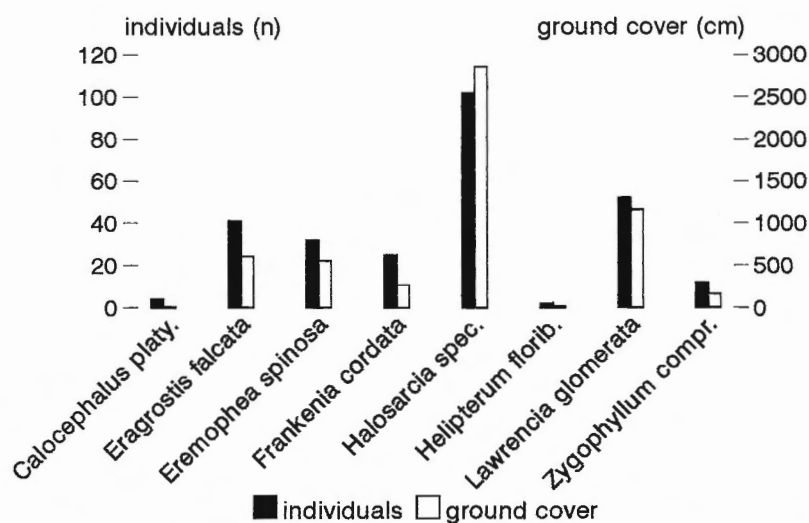


Fig. A6.27: saltmarsh, E8, 10.09.88, total ground cover: 56,5%

Fig. A6.25-27: analysis of ground-vegetation from random samples

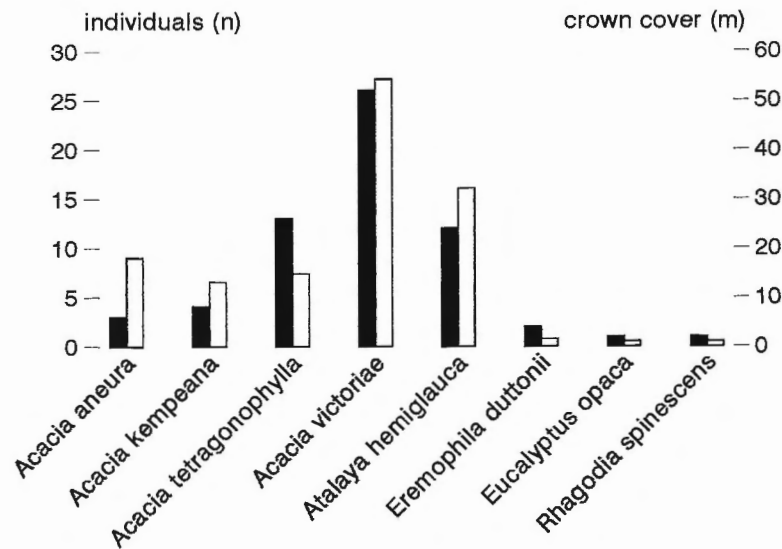


Fig. A7.1: bushland, total crown cover: 13,6%

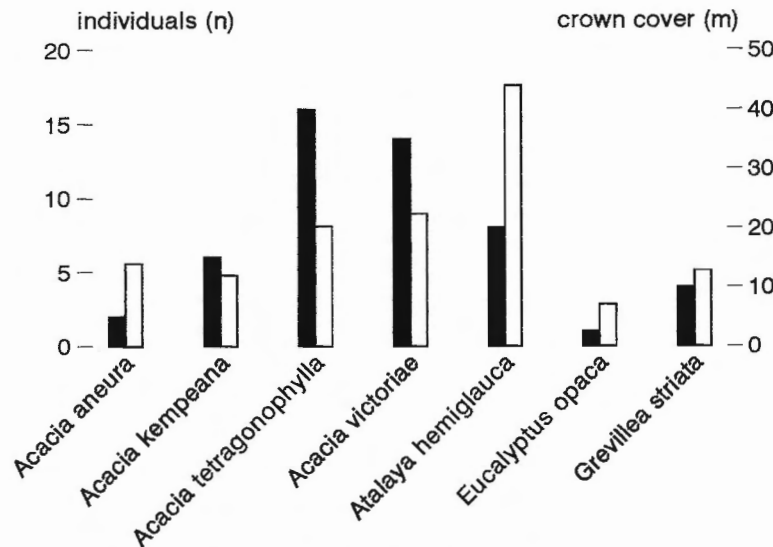


Fig. A7.2: bushland, total crown cover: 13,2%

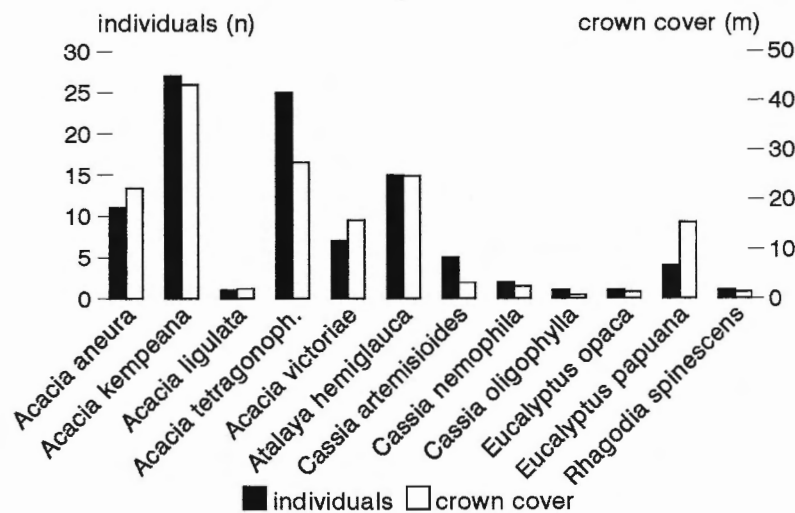


Fig. A7.3: bushland, total crown cover: 16%

Fig. A7.1-3: vegetation analysis of trees and shrubs



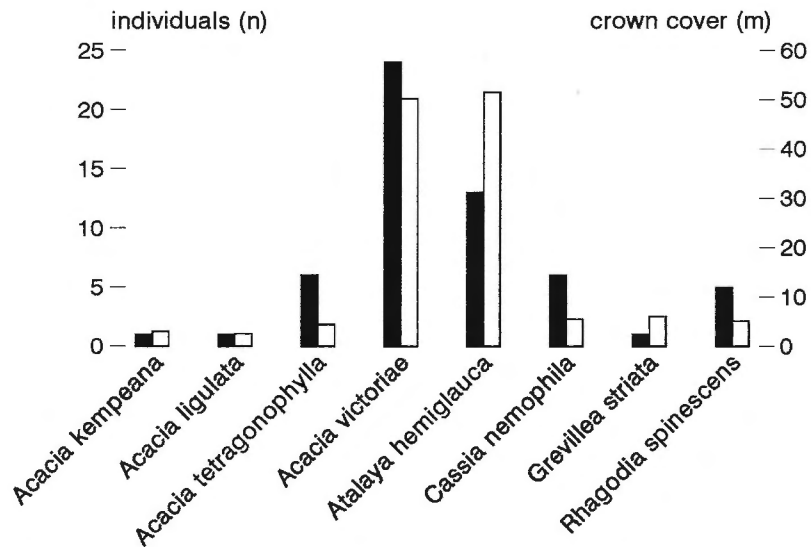


Fig. A7.4: bushland, total crown cover: 12,9%

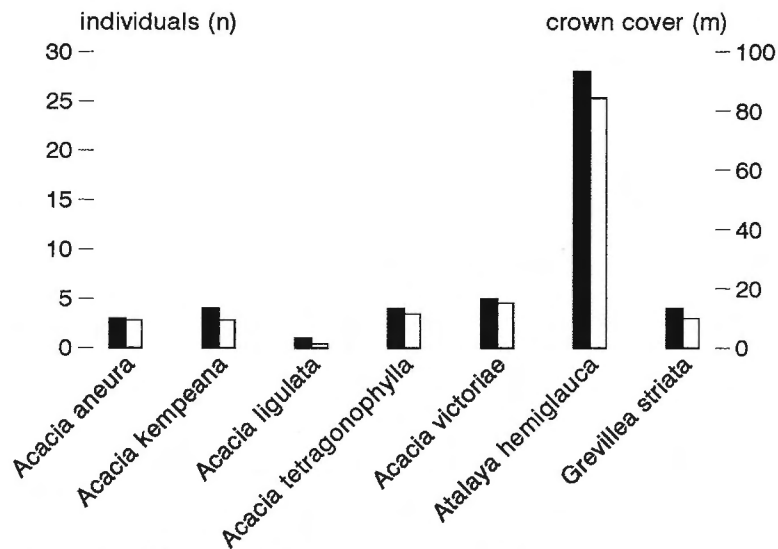


Fig. A7.5: bushland, total crown cover: 14,1%

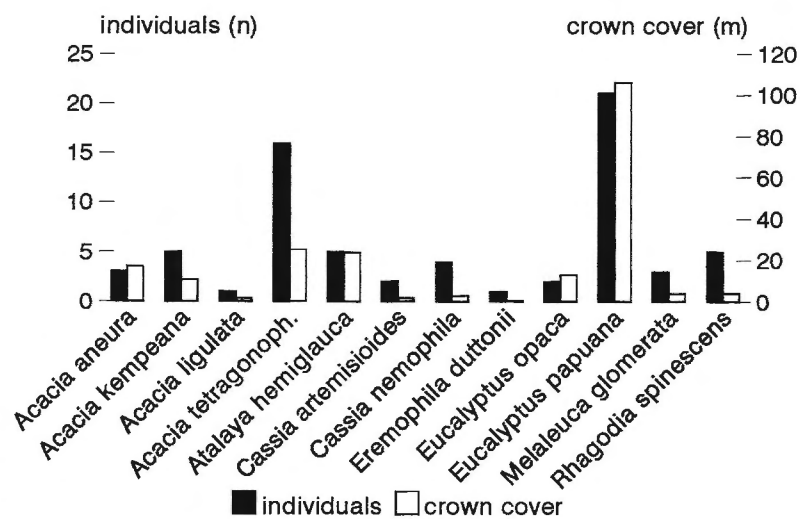


Fig. A7.6: bushland, total crown cover: 20,9%

Fig. A7.4-6: vegetation analysis of trees and shrubs

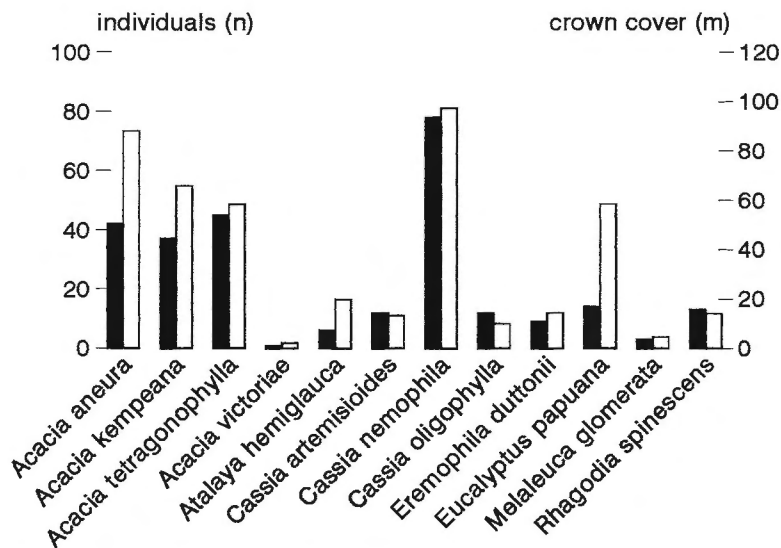


Fig. A7.7: bushland, total crown cover: 44,6%

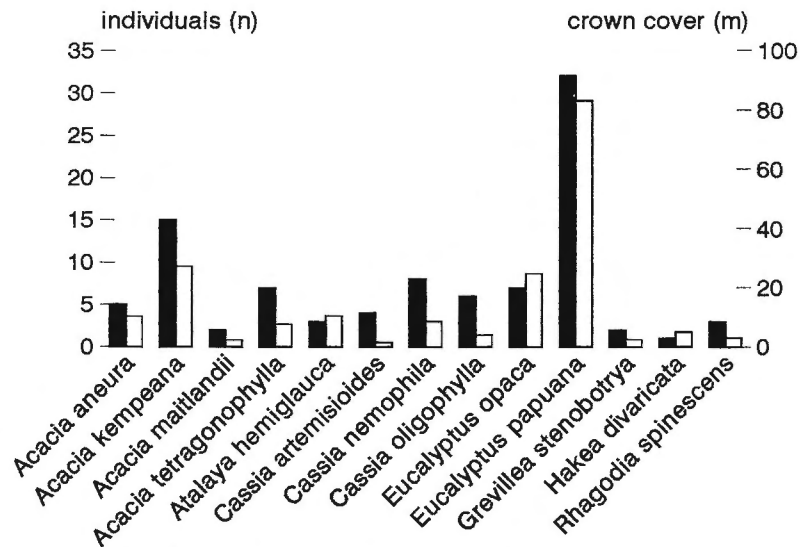


Fig. A7.8: bushland, total crown cover: 19%

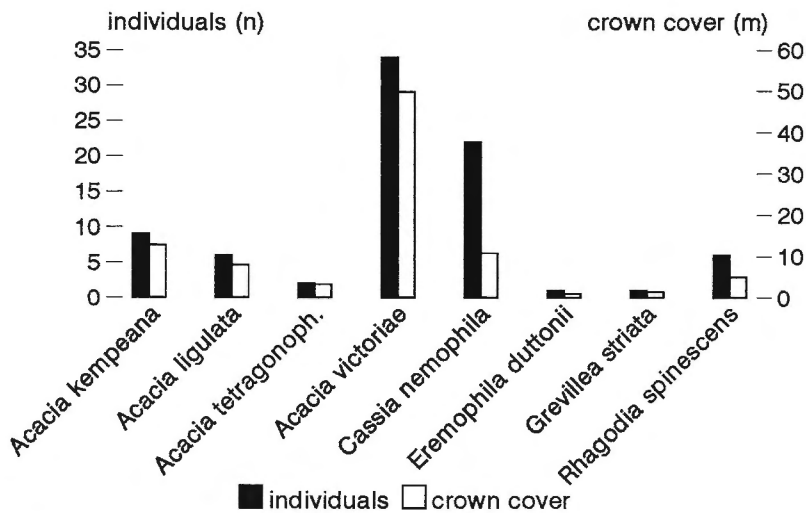


Fig. A7.9: bushland, total crown cover: 9,2%

Fig. A7.7-9: vegetation analysis of trees and shrubs

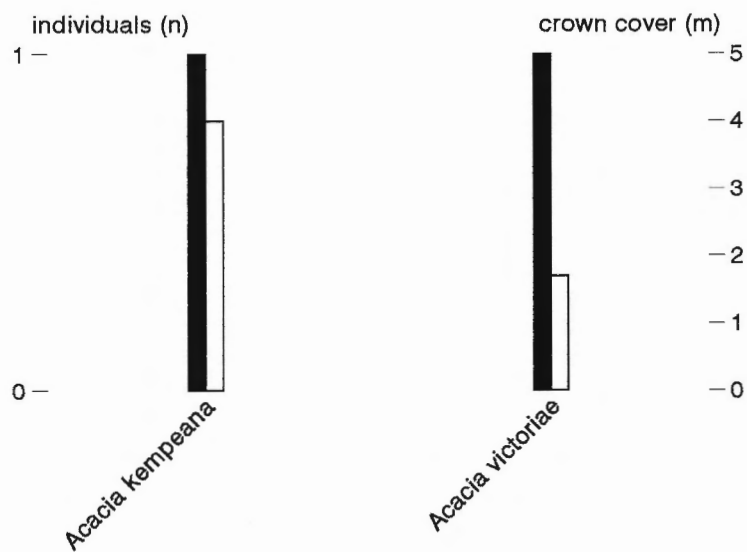


Fig. A7.10: open plain, total crown cover: 0,6%

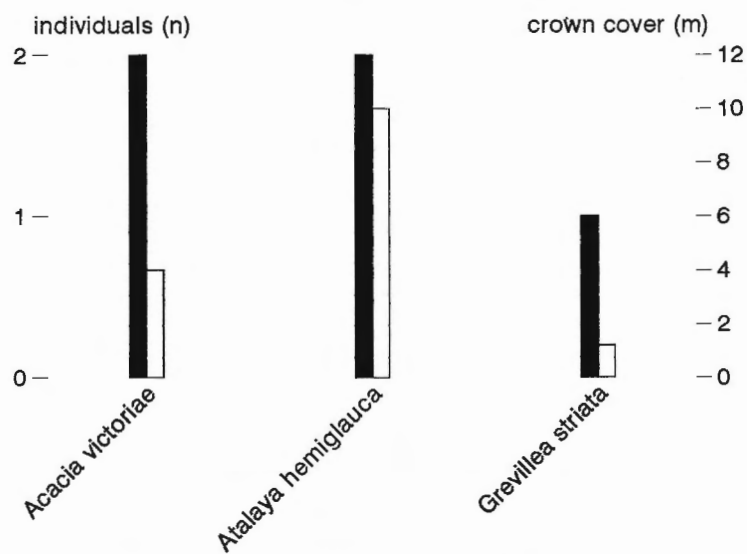


Fig. A7.11: open plain, total crown cover: 1,5%

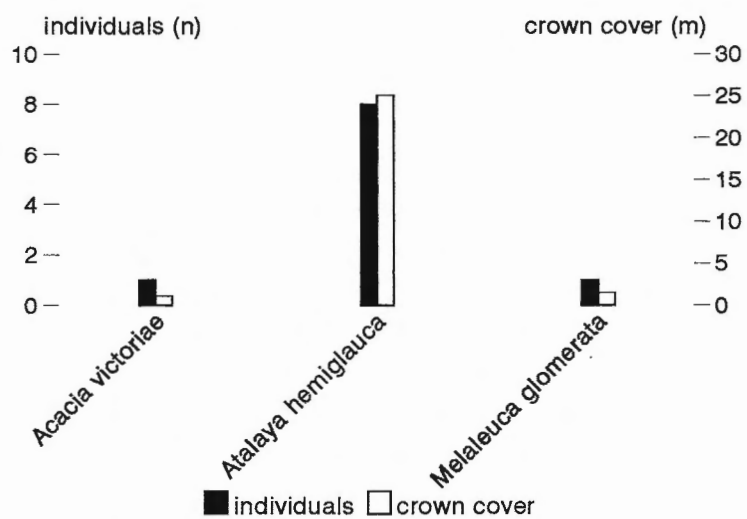


Fig. A7.12: open plain, total crown cover: 2,8%

Fig. A7.10-12: vegetation analysis of trees and shrubs

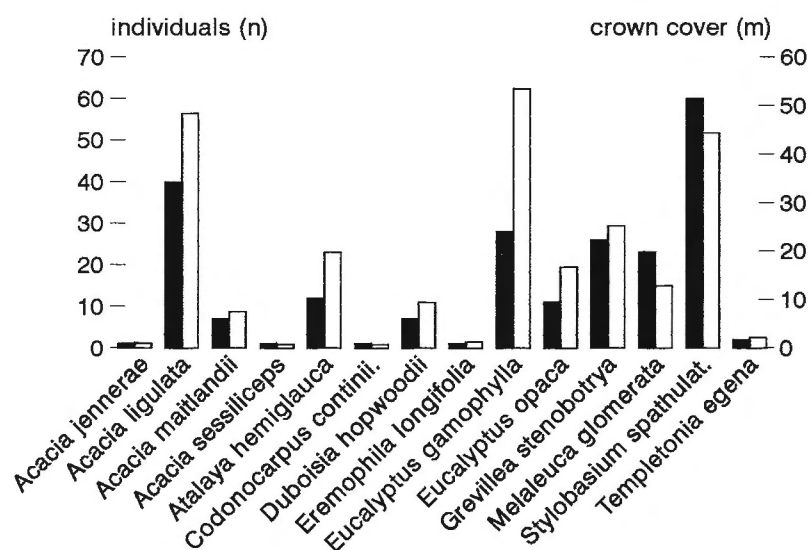


Fig. A7.13: sandplain/dunes, total crown cover: 24,4%

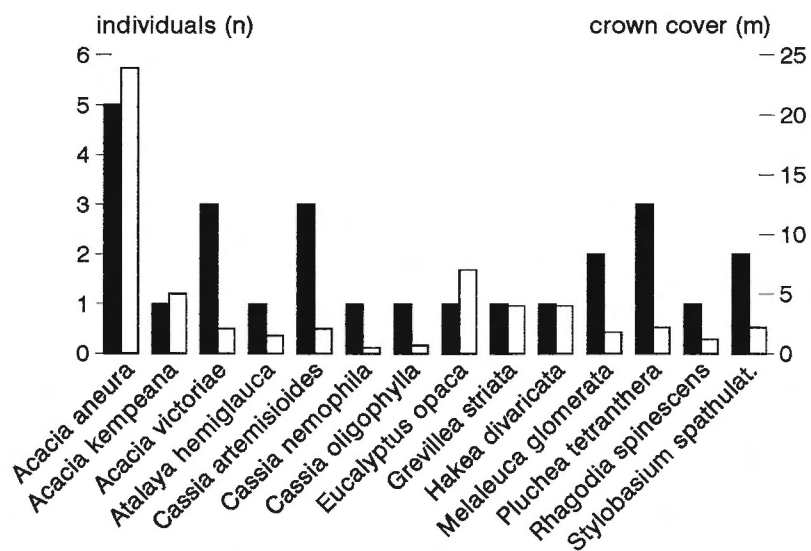


Fig. A7.14: sandplain/dunes, total crown cover: 5,8%

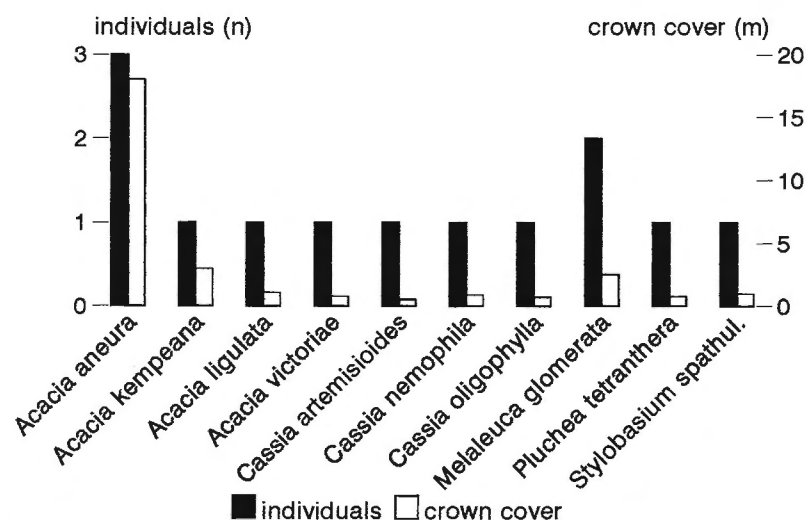


Fig. A7.15: sandplain/dunes, total crown cover: 2,9%

Fig. A7.13-15: vegetation analysis of trees and shrubs

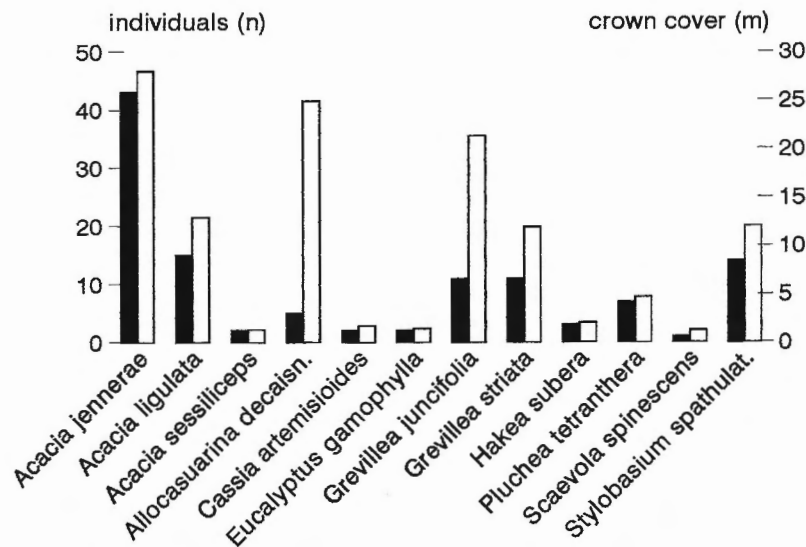


Fig. A7.16: sandplain/dunes, total crown cover: 12,3%

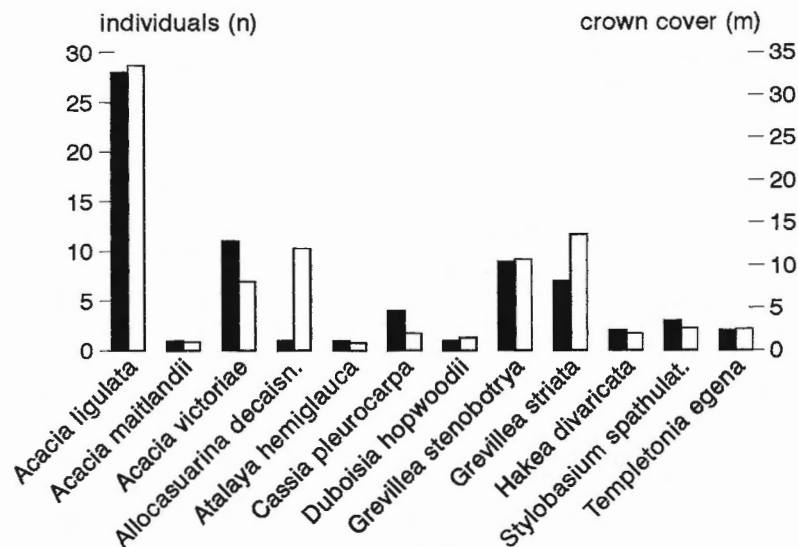


Fig. A7.17: sandplain/dunes, total crown cover: 9%

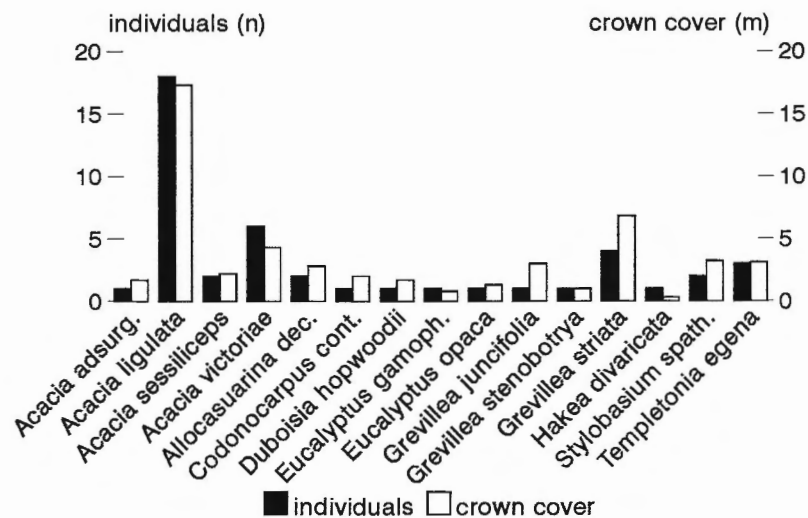


Fig. A7.18: sandplain/dunes, total crown cover: 5,2%

Fig. A7.16-18: vegetation analysis of trees and shrubs

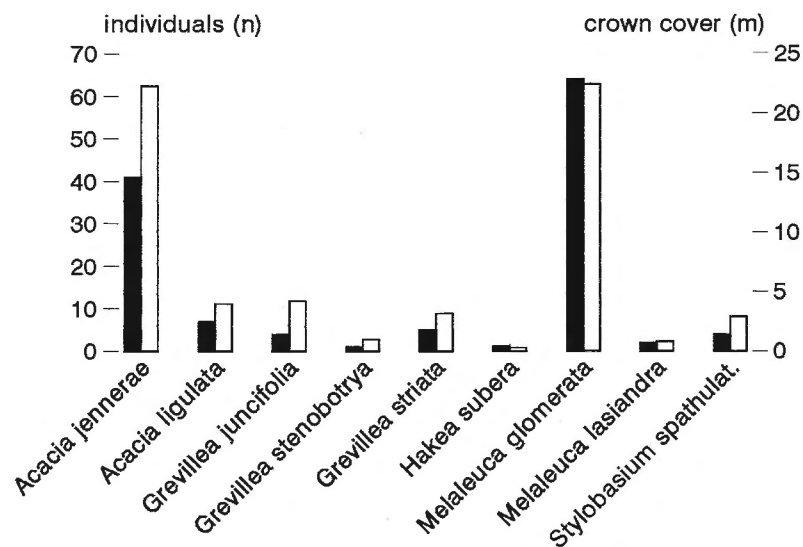


Fig. A7.19: sandplain/dunes, total crown cover: 6,1%

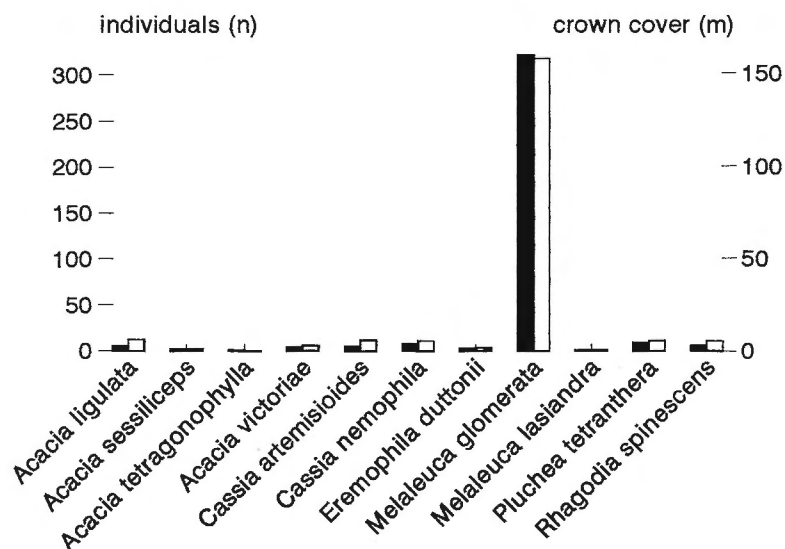


Fig. A7.20: sandplain/dunes, total crown cover: 19,2%

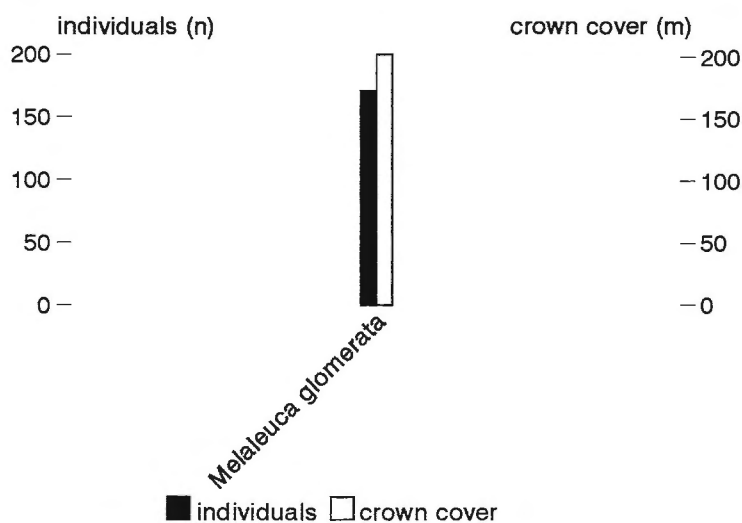


Fig. A7.21: sandplain, total crown cover: 20,3%

Fig. A7.19-21: vegetation analysis of trees and shrubs

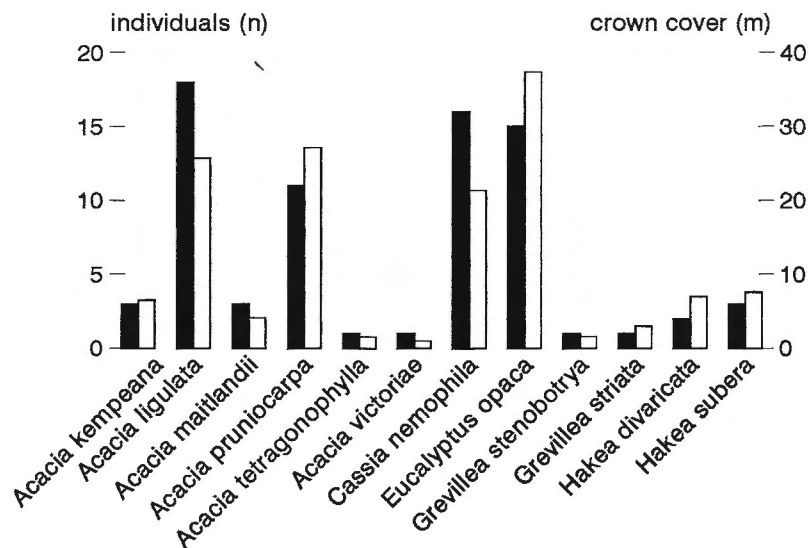


Fig. A7.22: sandplain/dunes, total crown cover: 14,4%

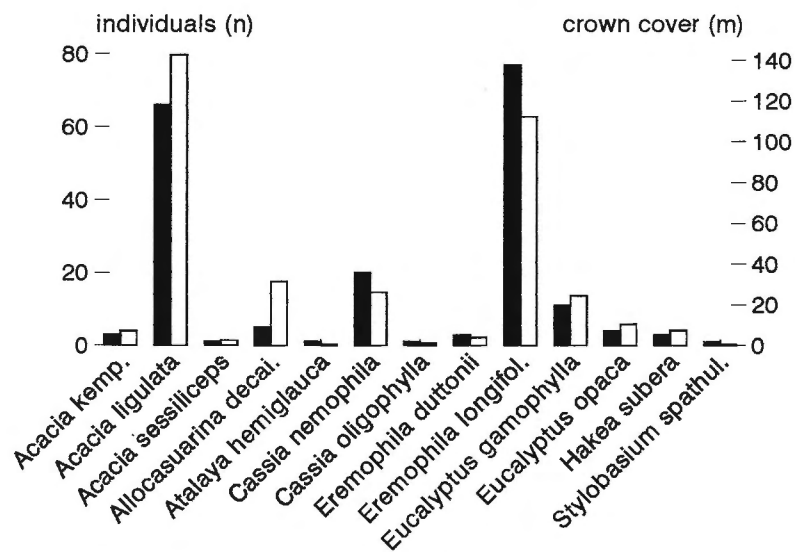


Fig. A7.23: sandplain/dunes, total crown cover: 37%

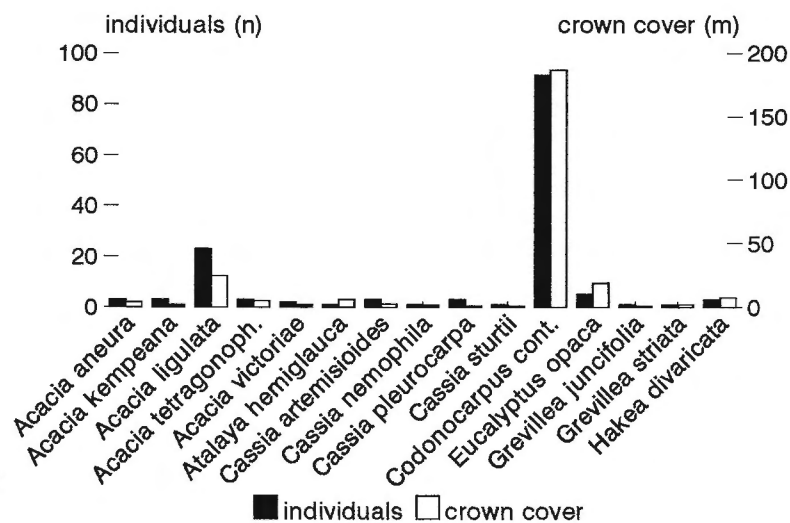


Fig. A7.24: sandplain/dunes, total crown cover: 26,4%

Fig. A7.22-24: vegetation analysis of trees and shrubs

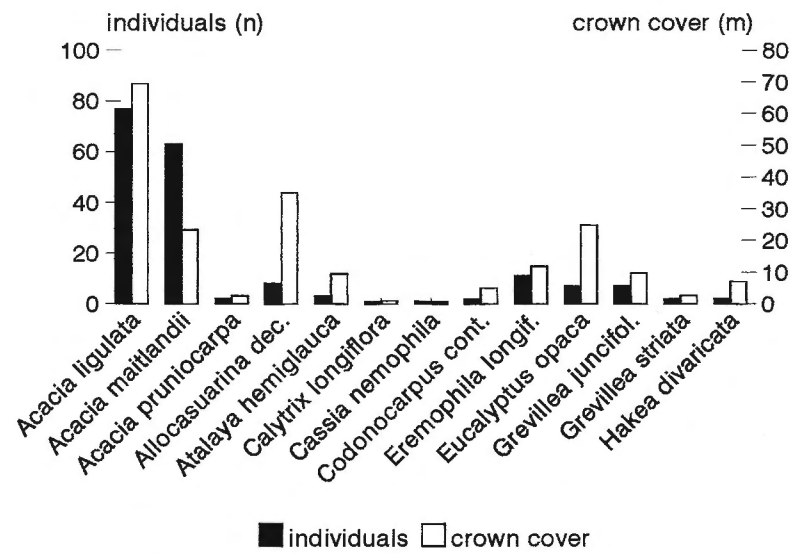


Fig. A7.25: sandplain/dunes, total crown cover: 20,2%  
 Fig. A7.25: vegetation analysis of trees and shrubs



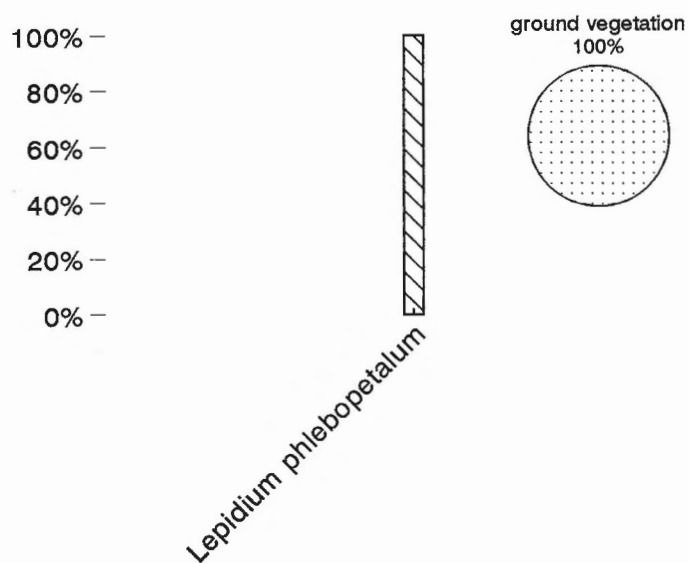


Fig. A8.1: valley in the hills, Todd River Station, 01.10.88

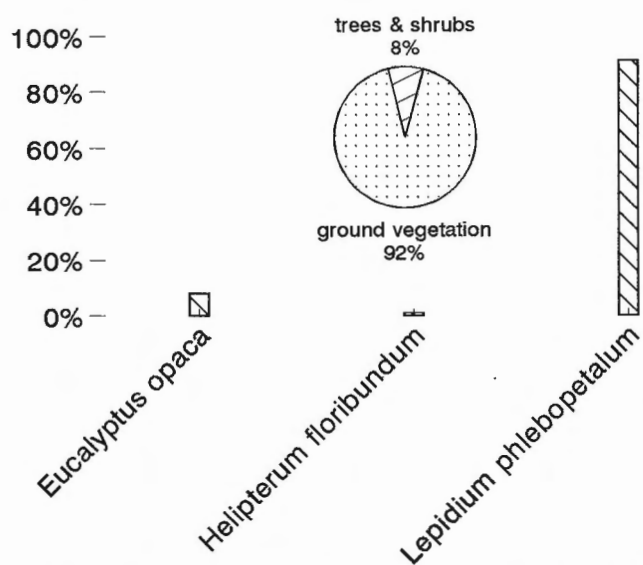


Fig. A8.2: valley in the hills, Todd River Station, 01.10.88

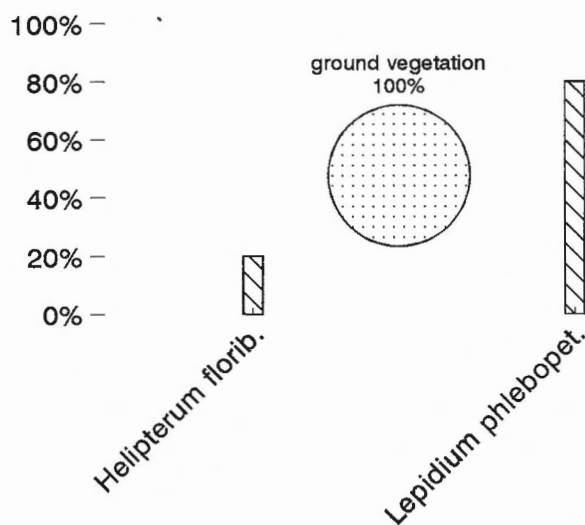


Fig. A8.3: open plain, Todd River Station, 01.10.88

Fig. A8.1-3: quantitative food selection of domestic dromedaries

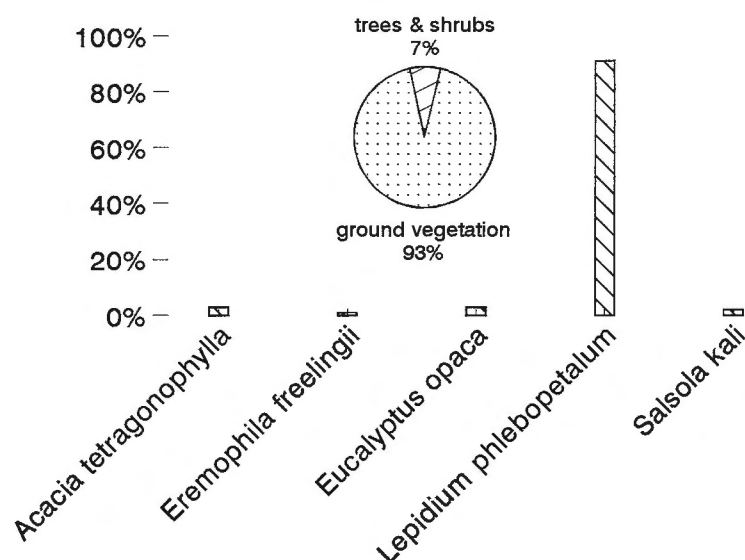


Fig. A8.4: valley in the hills, Todd River Station, 09.02.89

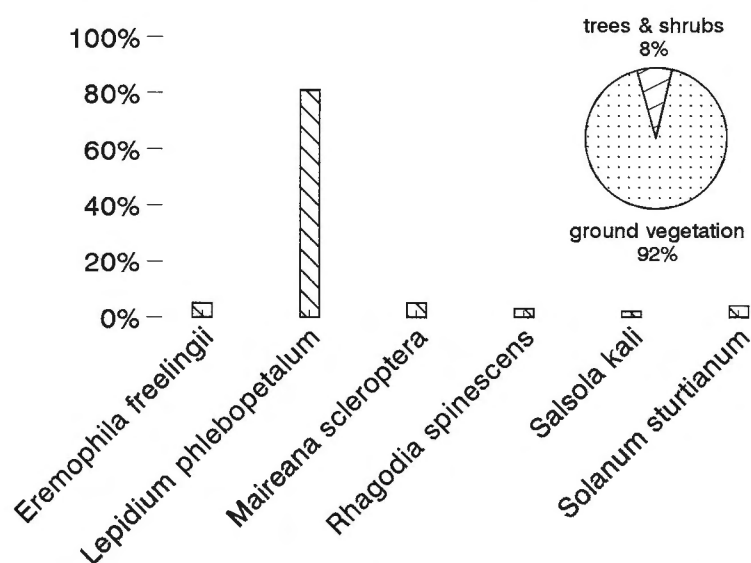


Fig. A8.5: valley in the hills, Todd River Station, 09.02.89

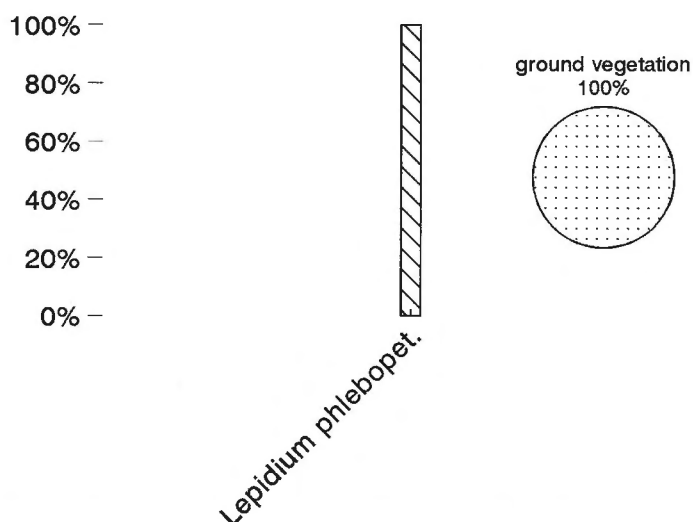


Fig. A8.6: open plain, Todd River Station, 09.02.89

Fig. A8.4-6: quantitative food selection of domestic dromedaries

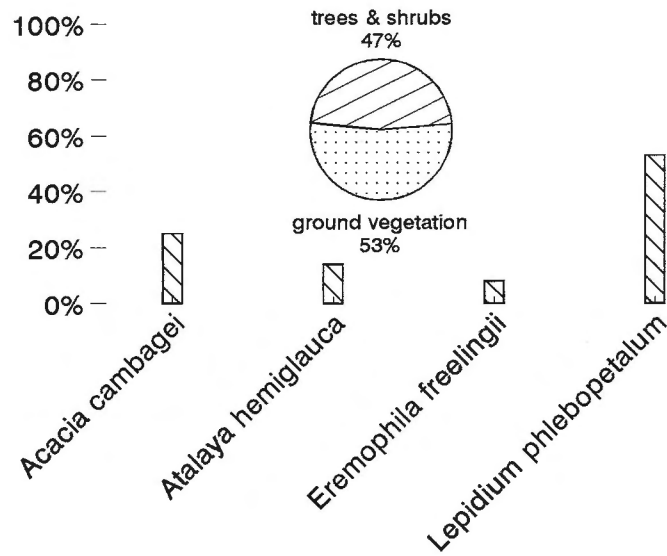


Fig. A8.7: bushland, Todd River Station, 09.02.89

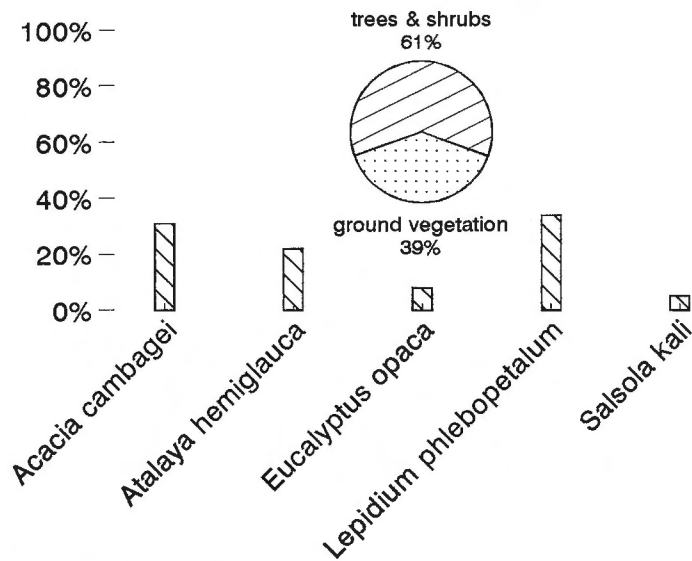


Fig. A8.8: bushland, Todd River Station, 09.02.89

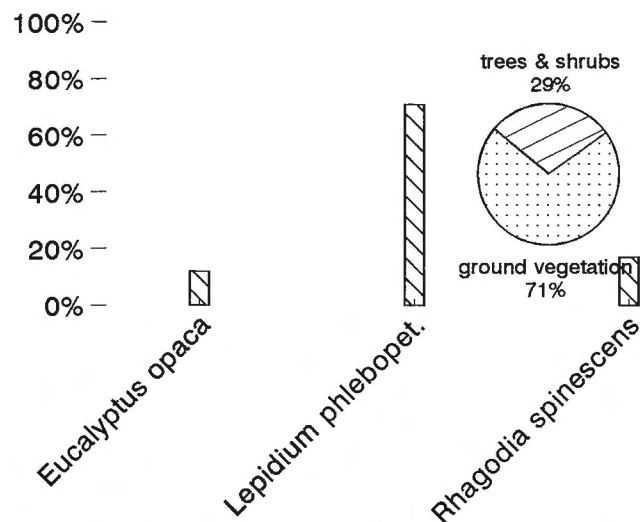


Fig. A8.9: valley in the hills, Todd River Station, 09.02.89

Fig. A8.7-9: quantitative food selection of domestic dromedaries

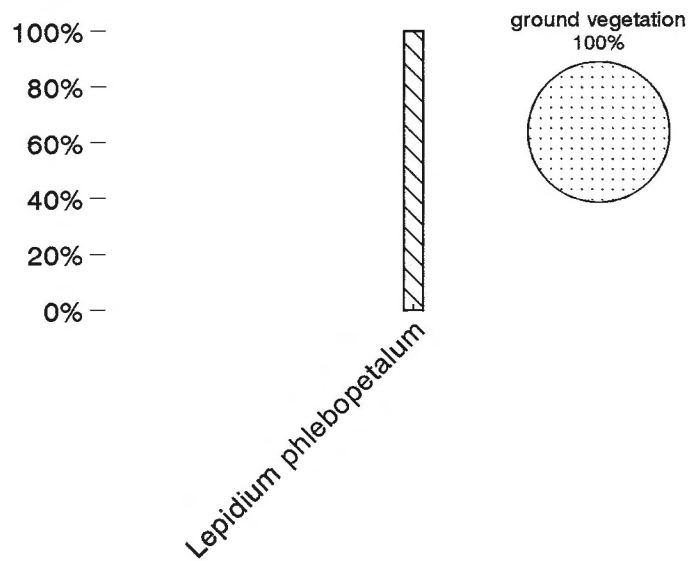


Fig. A8.10: open plain, Todd River Station, 31.07.89

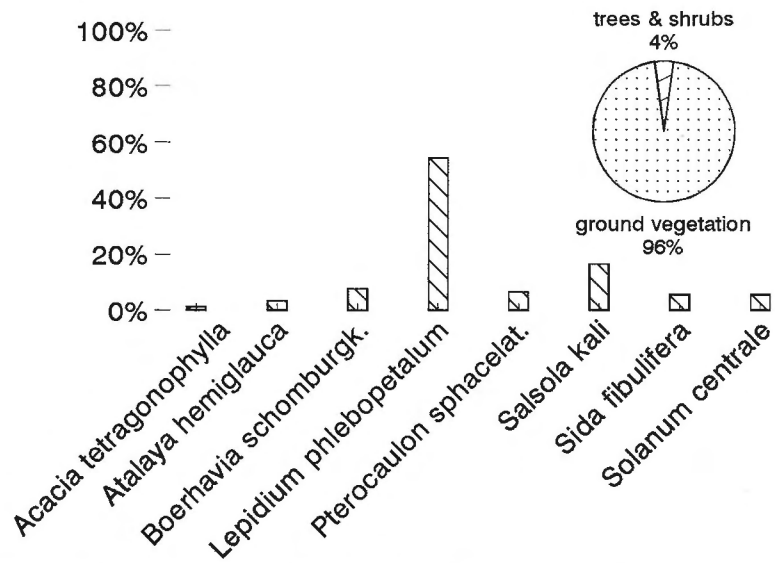


Fig. A8.11: bushland, Todd River Station, 31.07.89

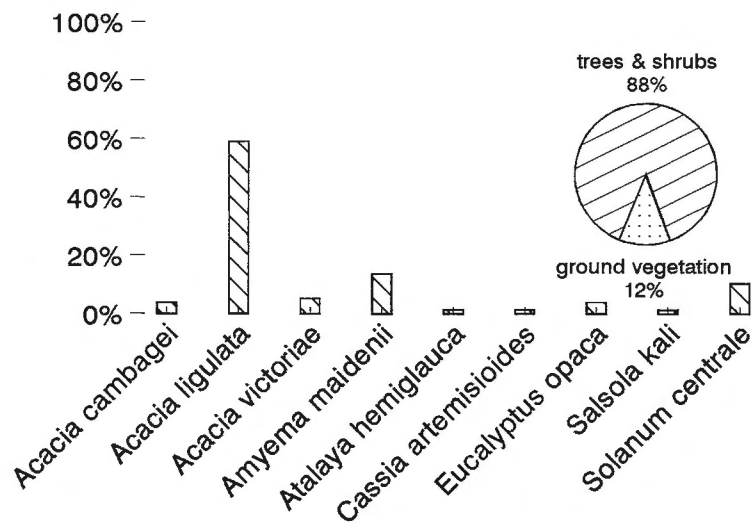


Fig. A8.12: bushland, Todd River Station, 31.07.89

Fig. A8.10-12: quantitative food selection of domestic dromedaries

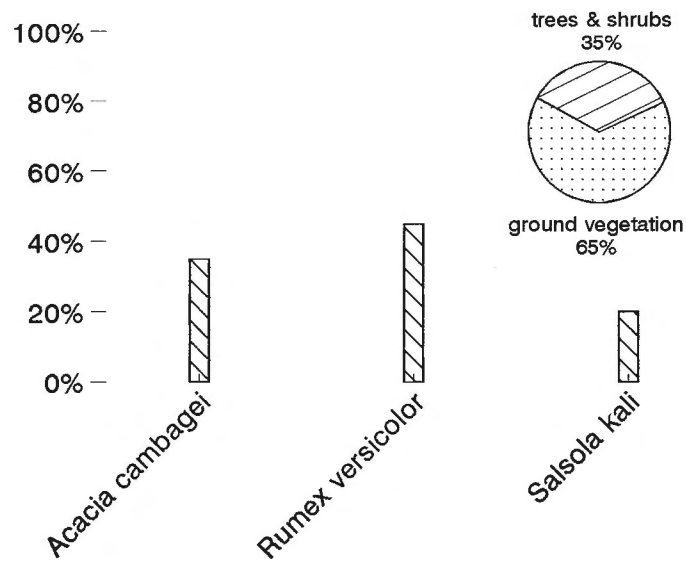


Fig. A8.13: bushland, Ringwood Station, 01.12.88

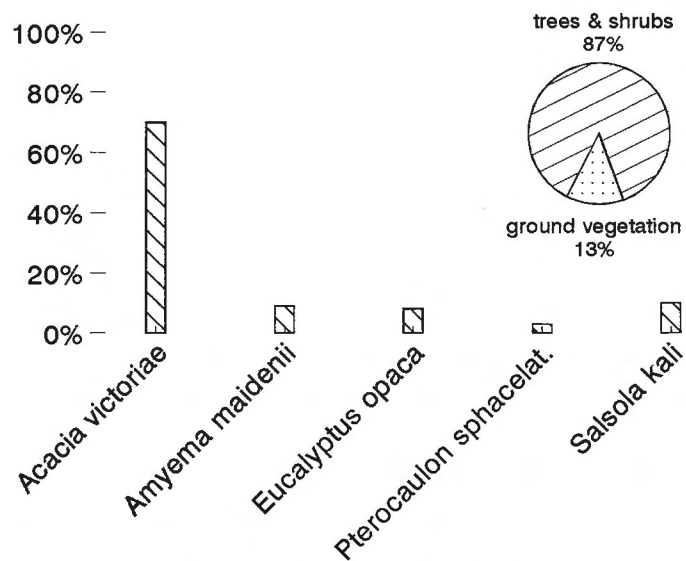


Fig. A8.14: creek, Ringwood Station, 01.12.88

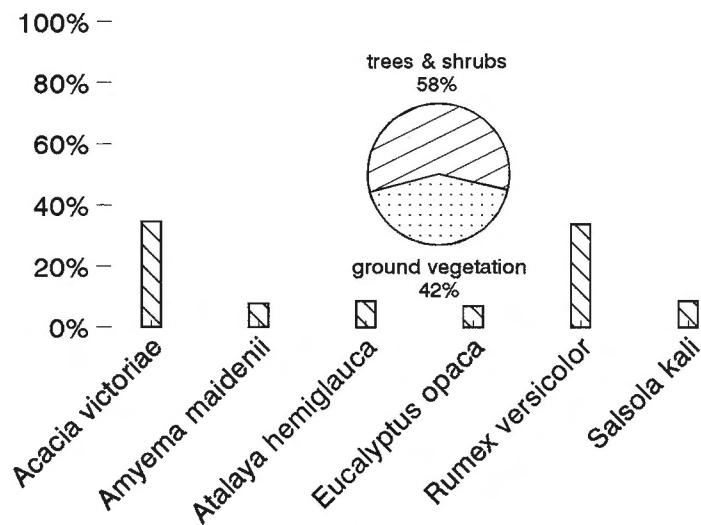


Fig. A8.15: creek, Ringwood Station, 02.12.88

Fig. A8.13-15: quantitative food selection of domestic dromedaries

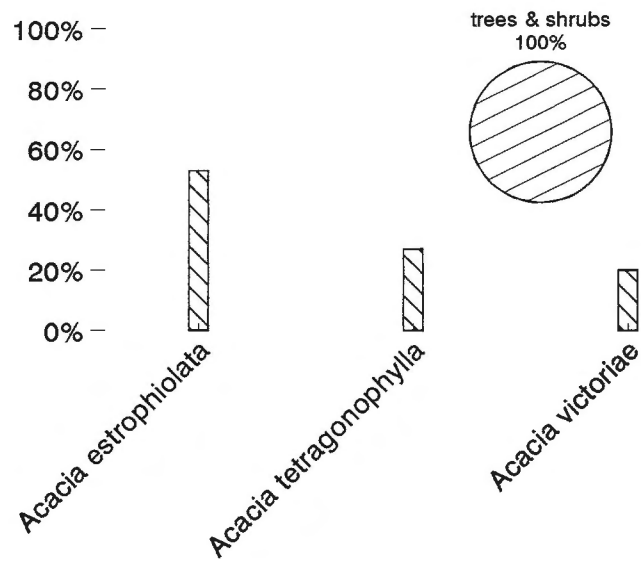


Fig. A8.16: bushland, Ringwood Station, 10.02.89

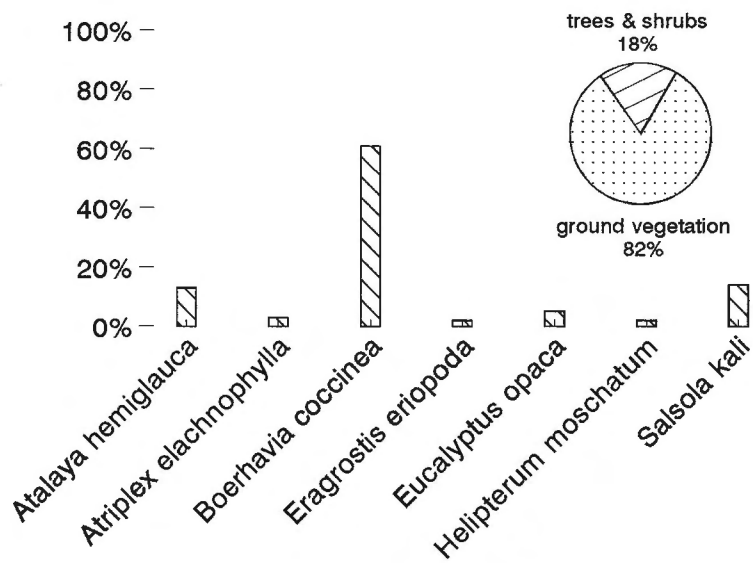


Fig. A8.17: creek, Ringwood Station, 10.02.89

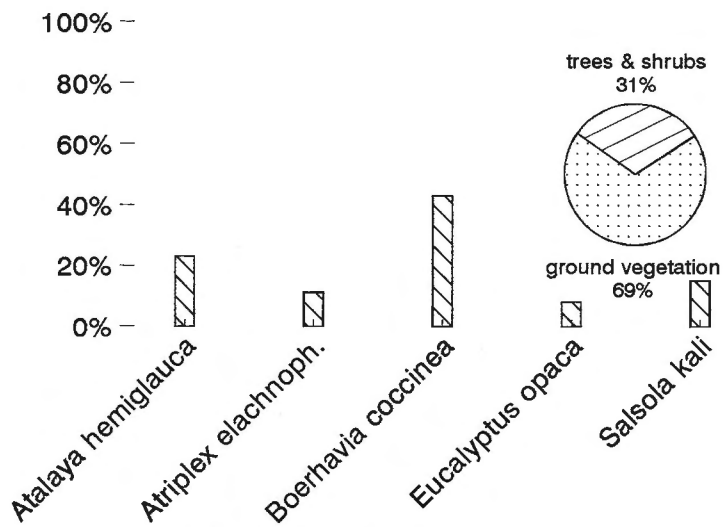
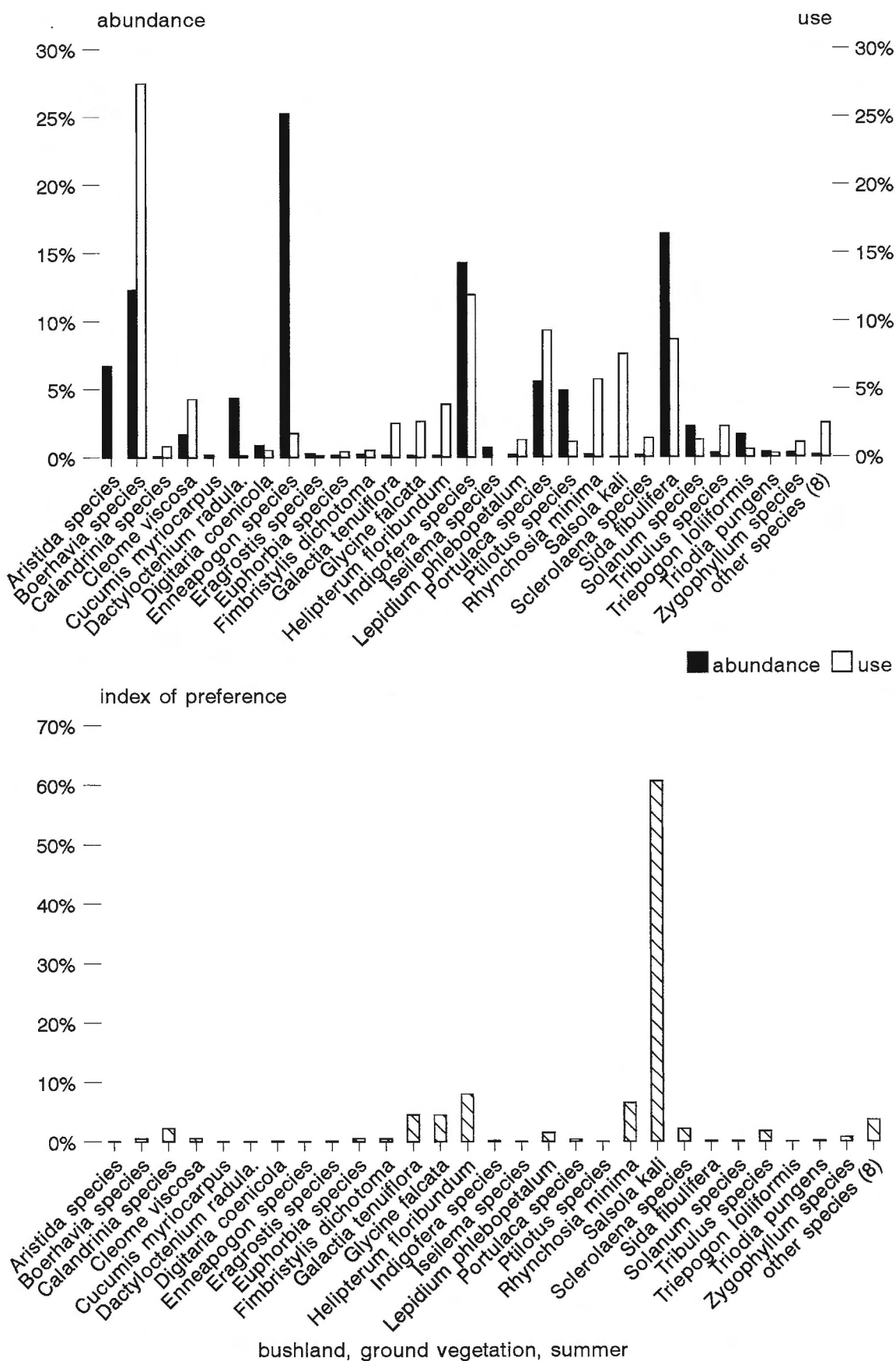


Fig. A8.18: creek, Ringwood Station, 10.02.89

Fig. A8.16-18: quantitative food selection of domestic dromedaries



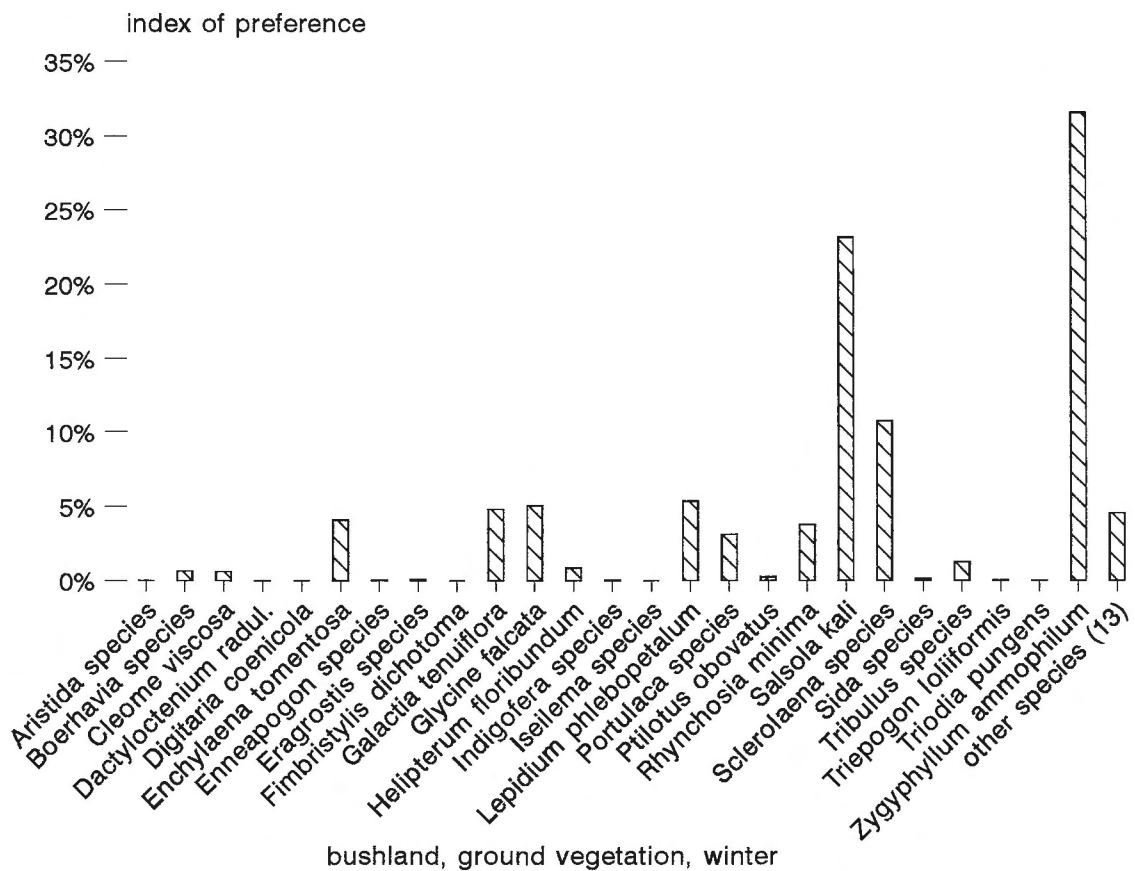
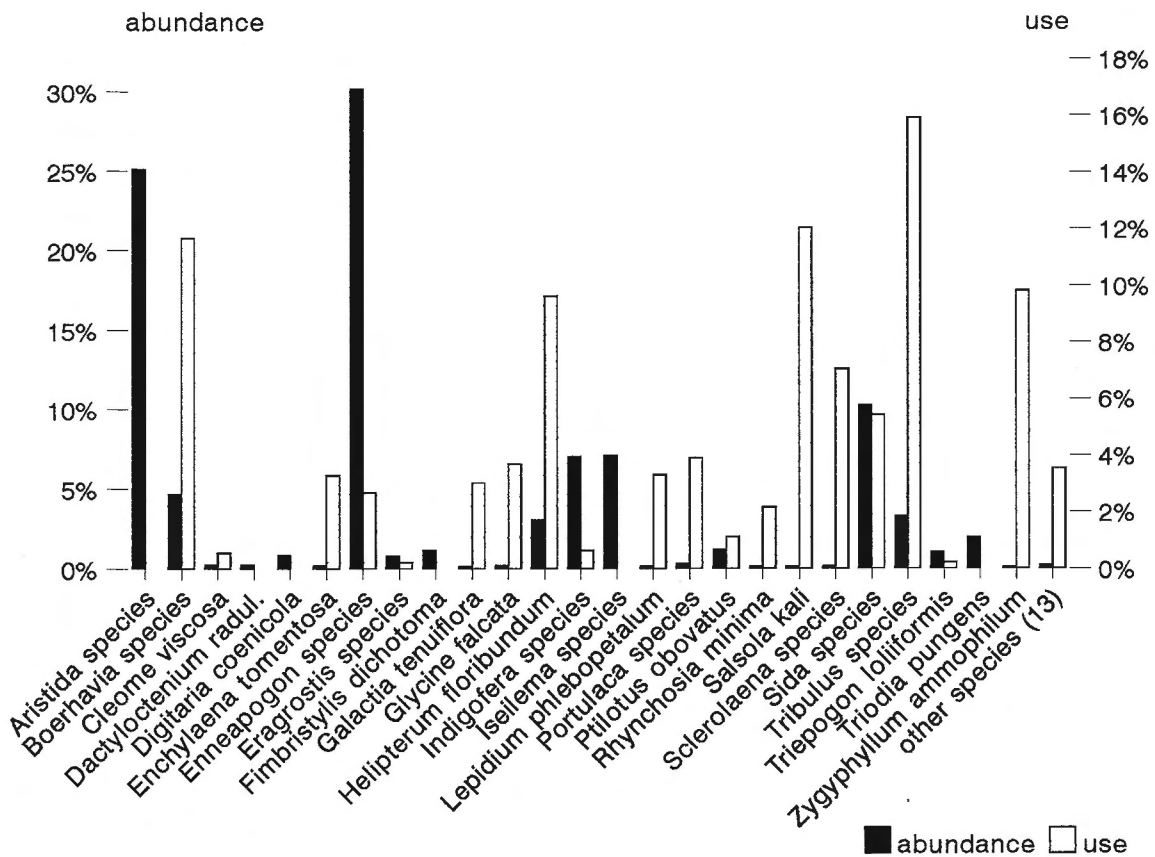


Fig. A9.1b: Comprehensive proportion rate of abundance and use



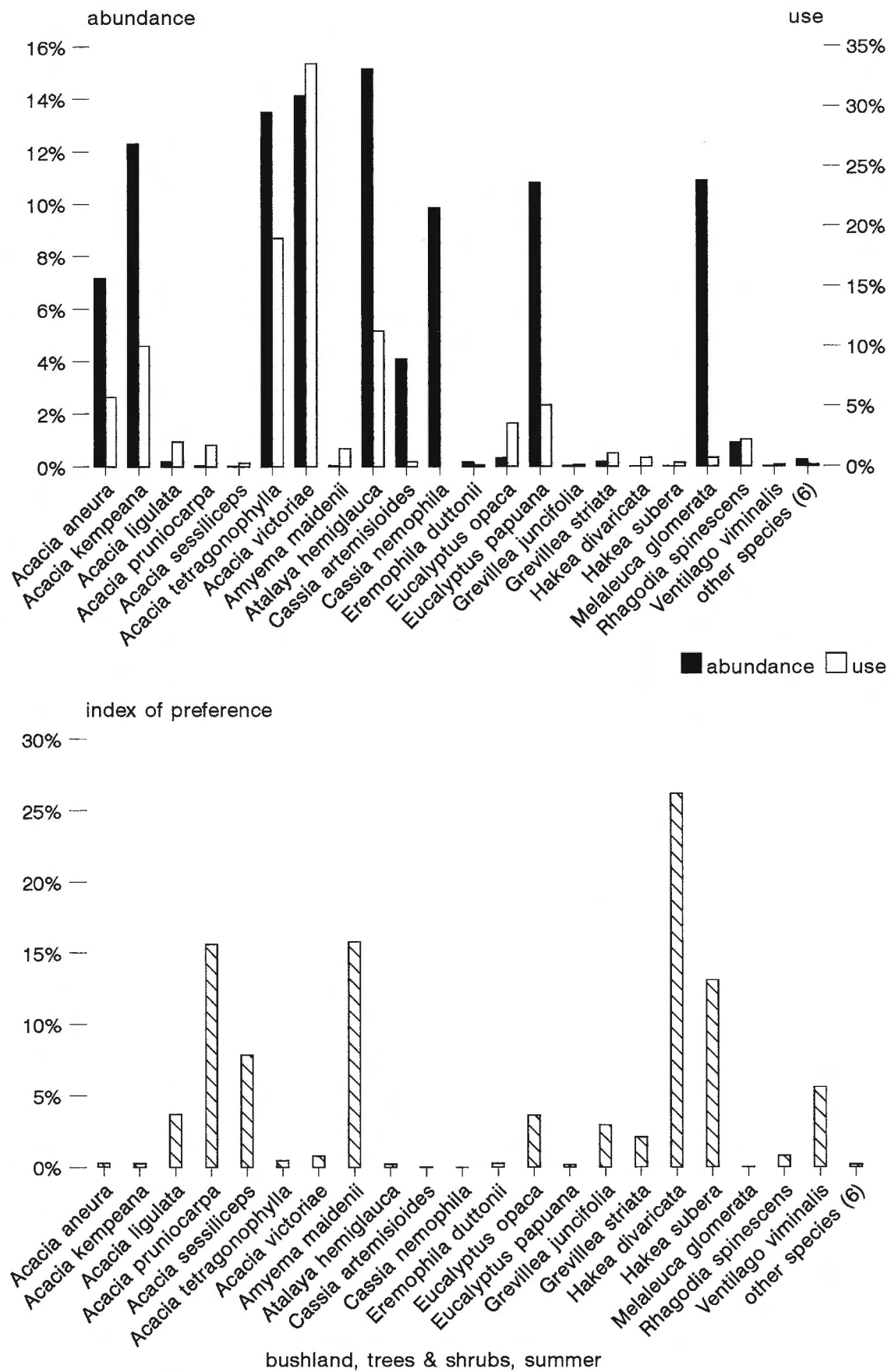


Fig. A9.1c: Comprehensive proportion rate of abundance and use

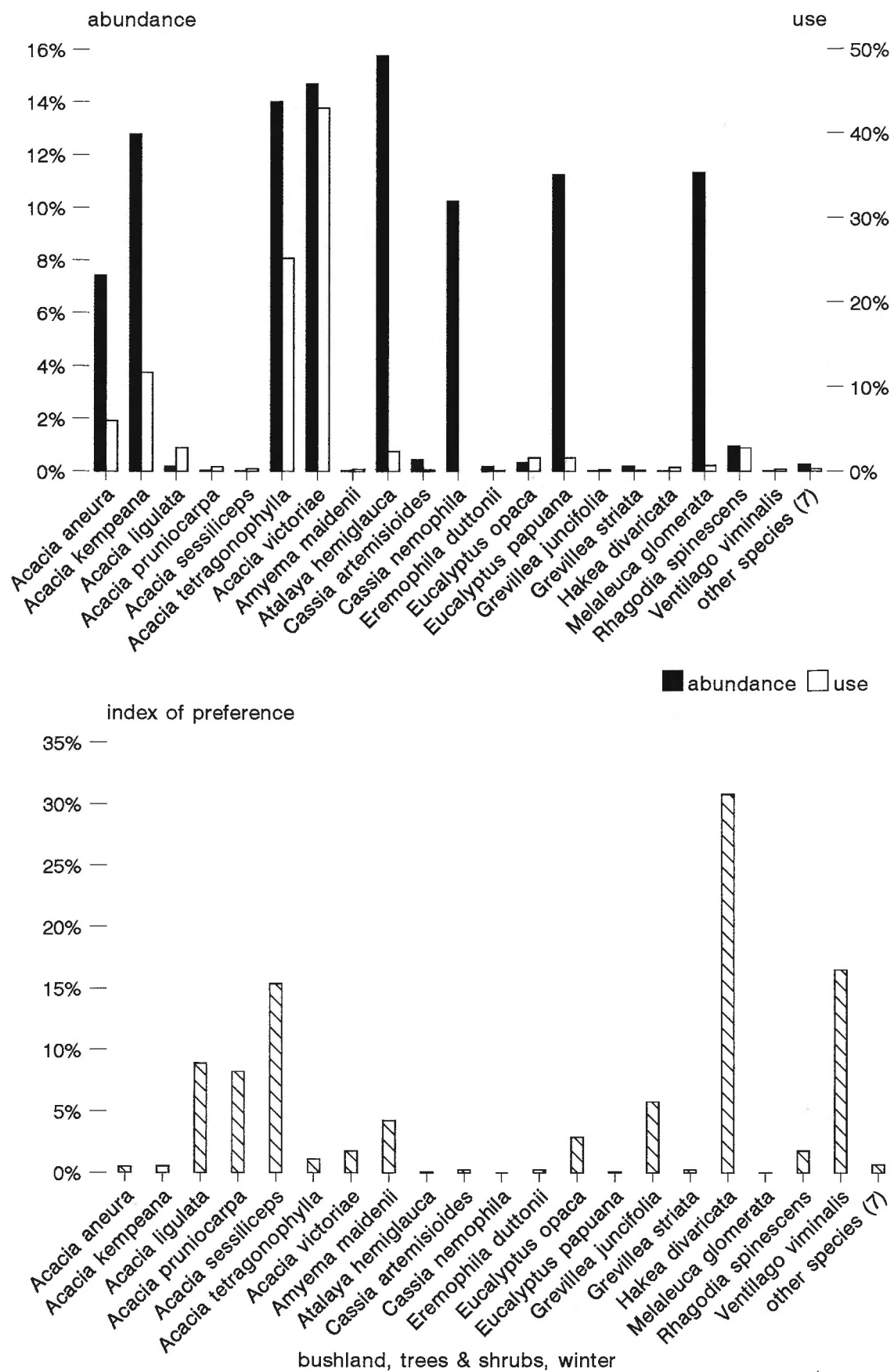


Fig. A9.1d: Comprehensive proportion rate of abundance and use

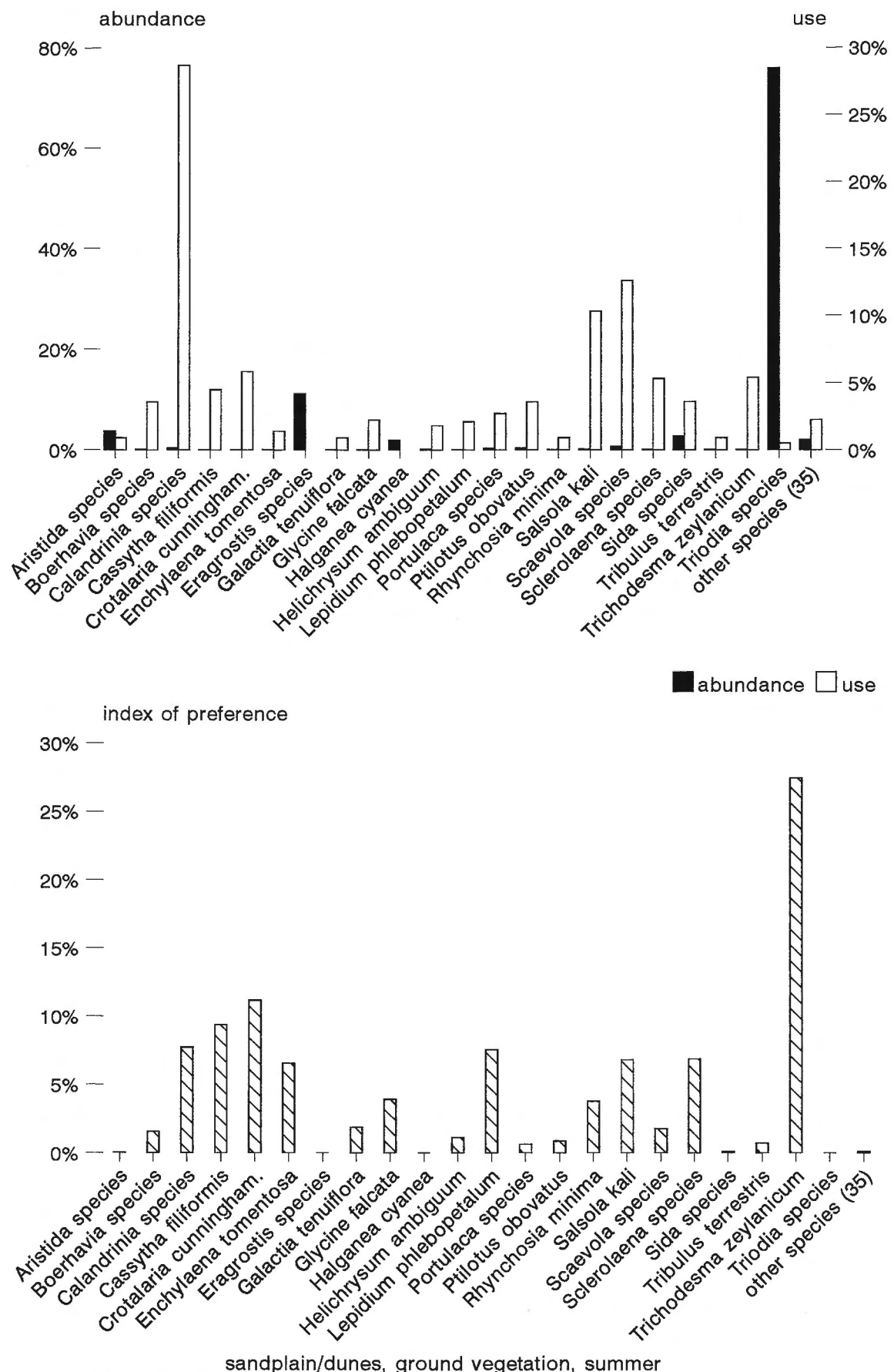


Fig. A9.2a: Comprehensive proportion rate of abundance and use

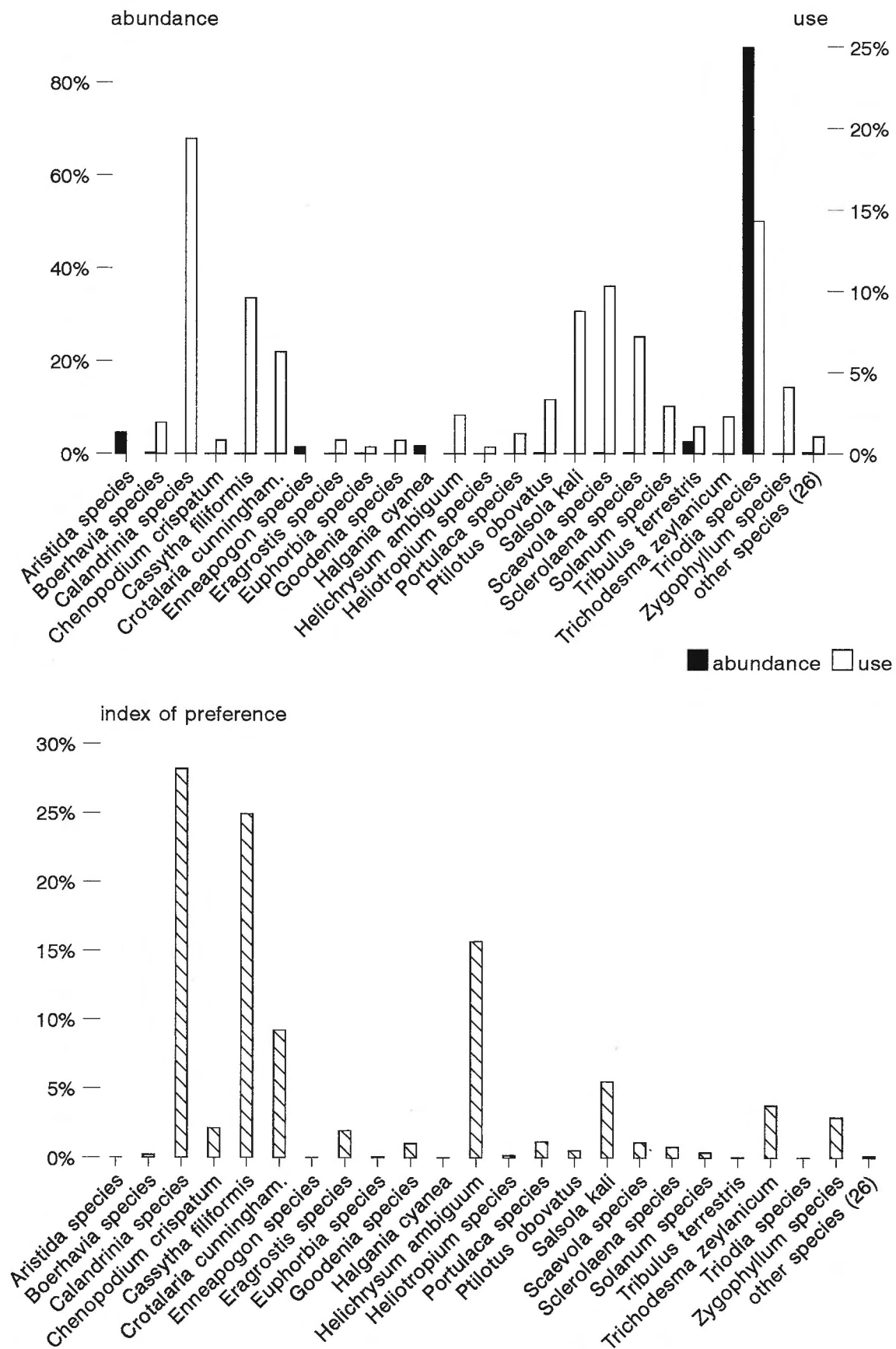


Fig. A9.2b: Comprehensive proportion rate of abundance and use

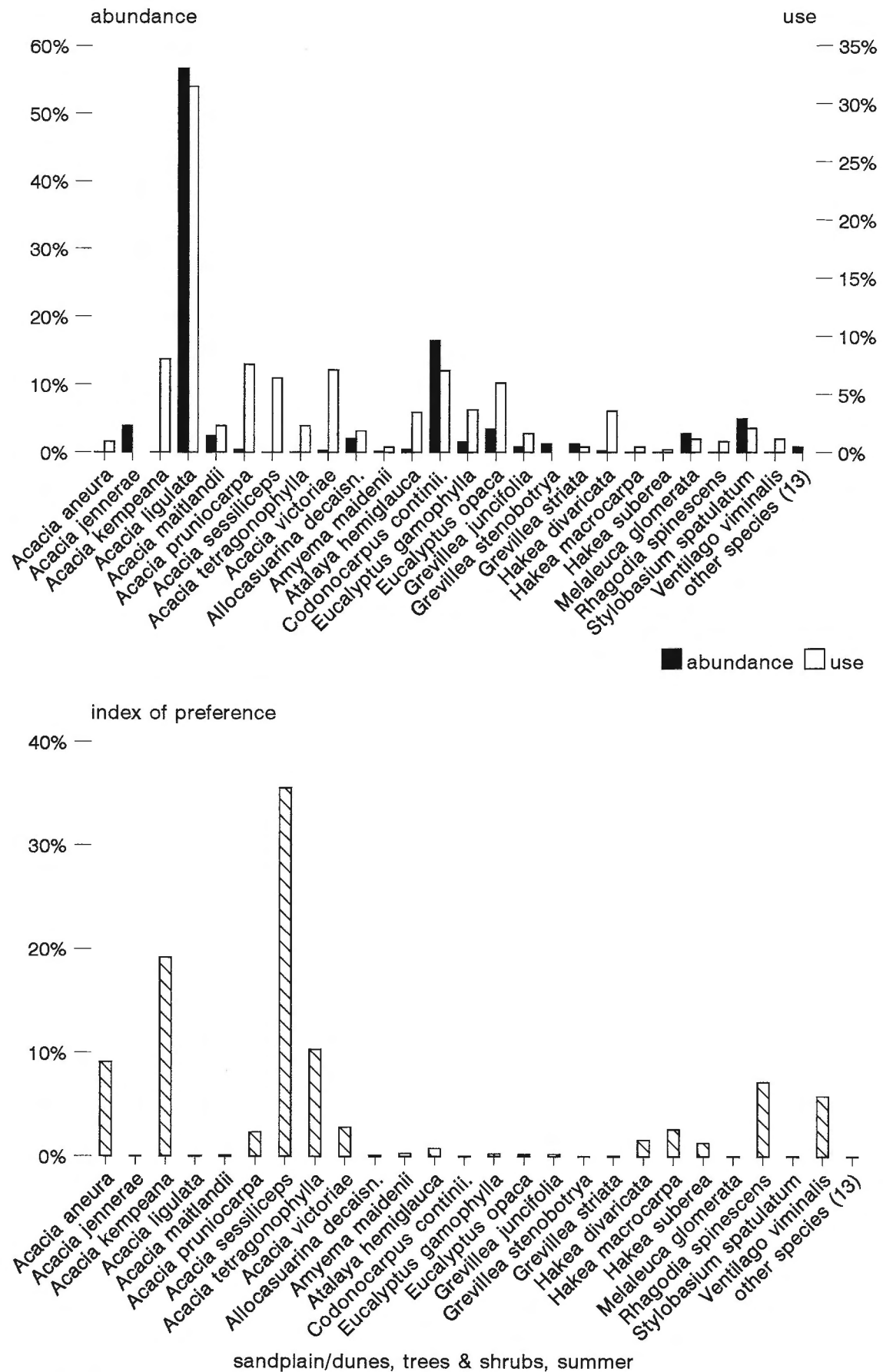
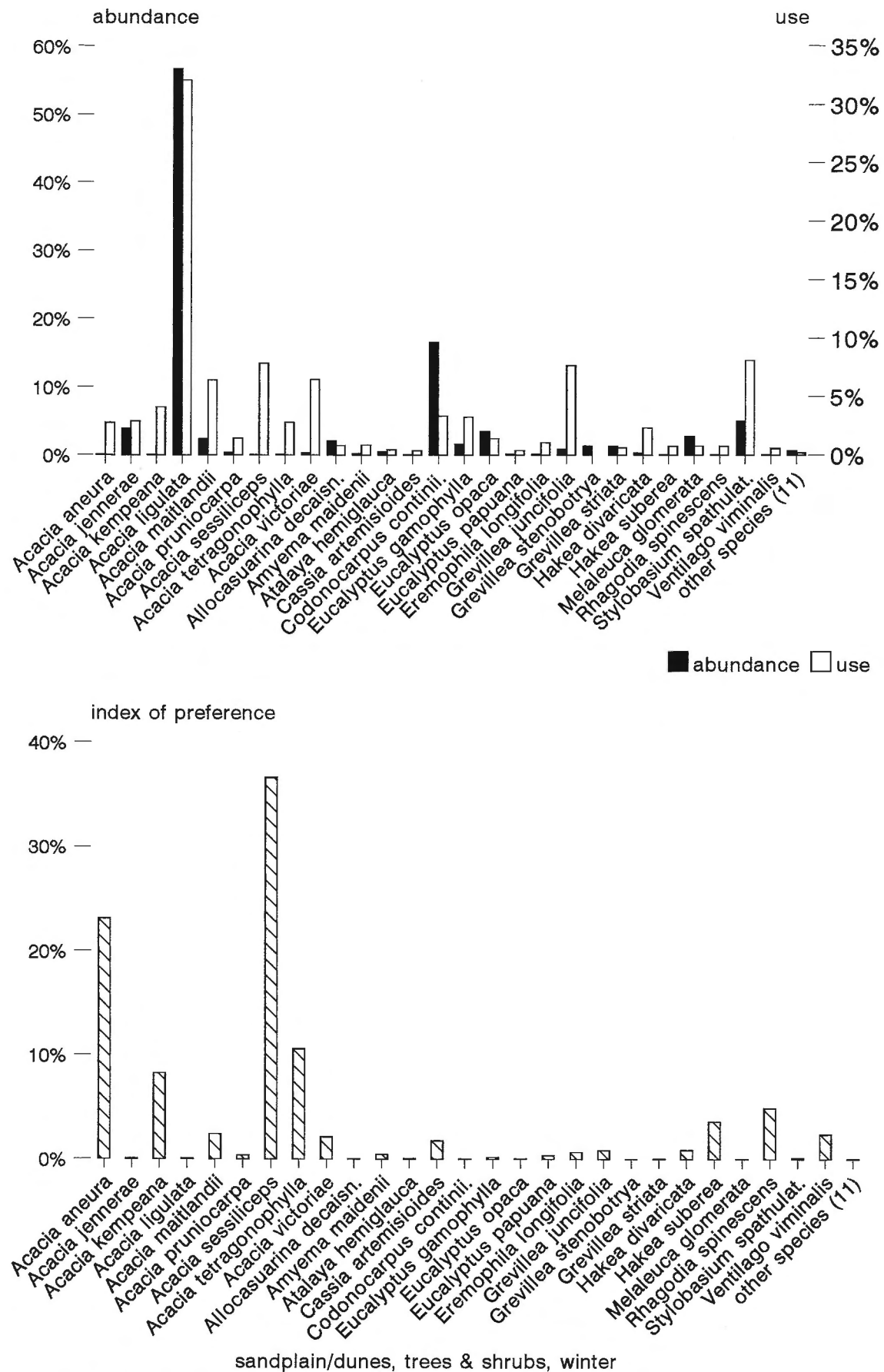


Fig. A9.2c: Comprehensive proportion rate of abundance and use



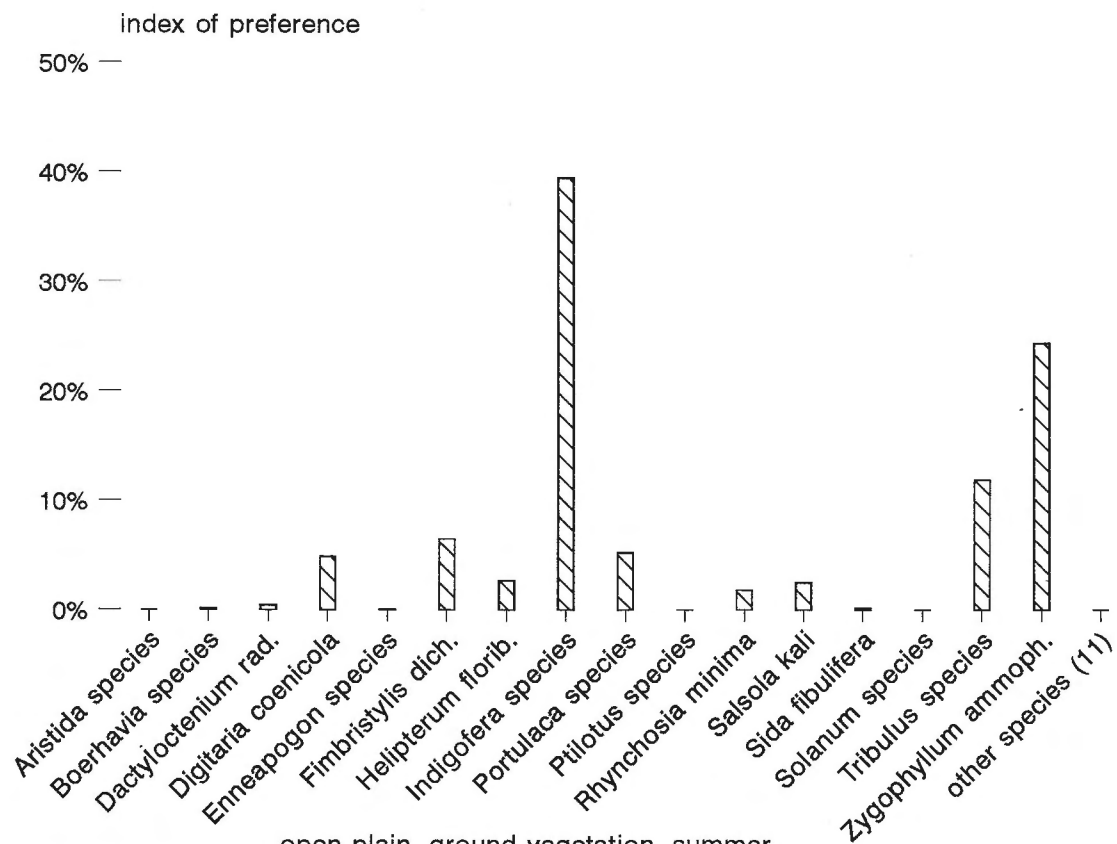
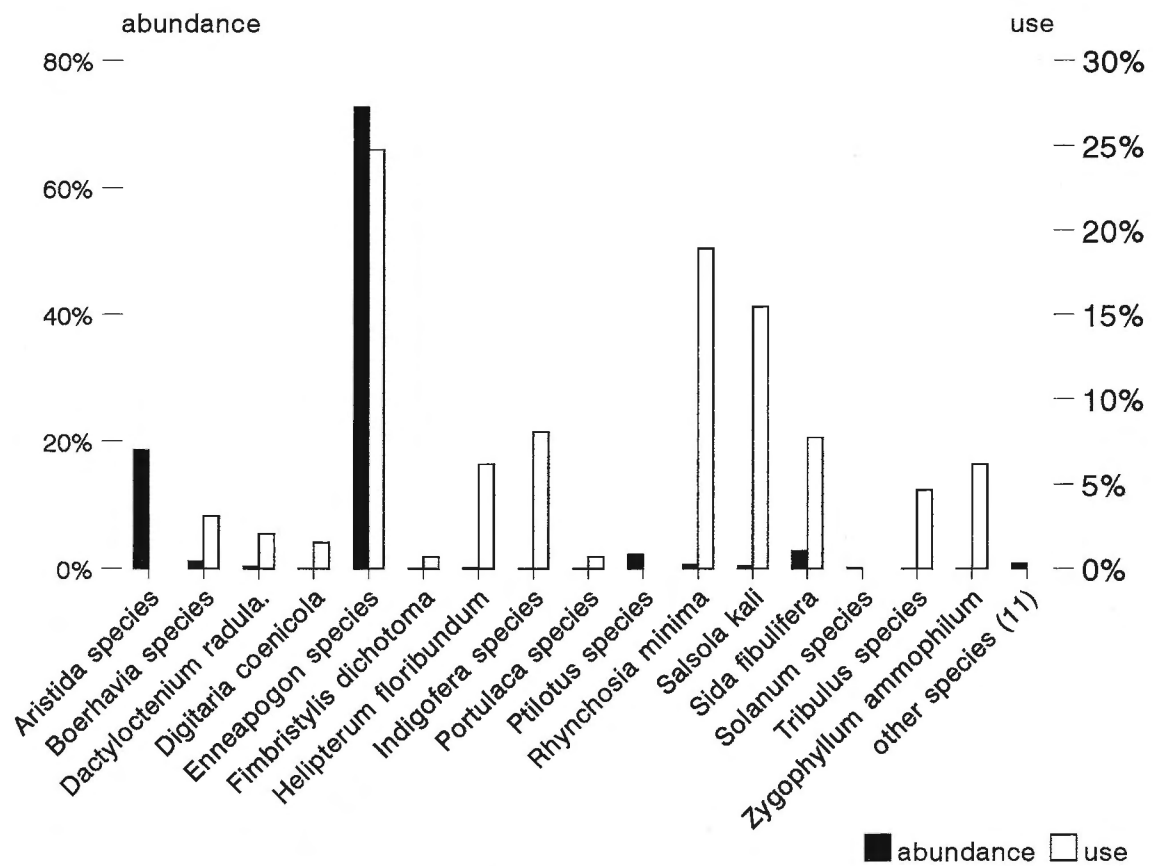
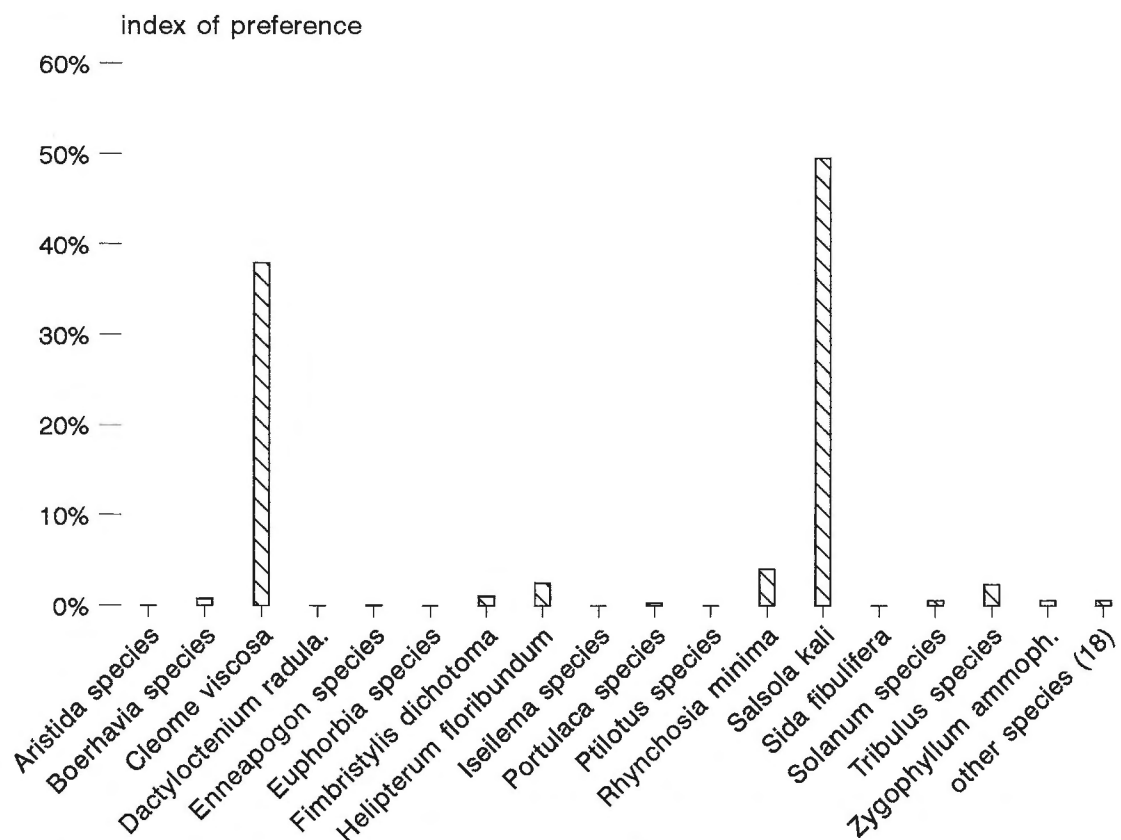
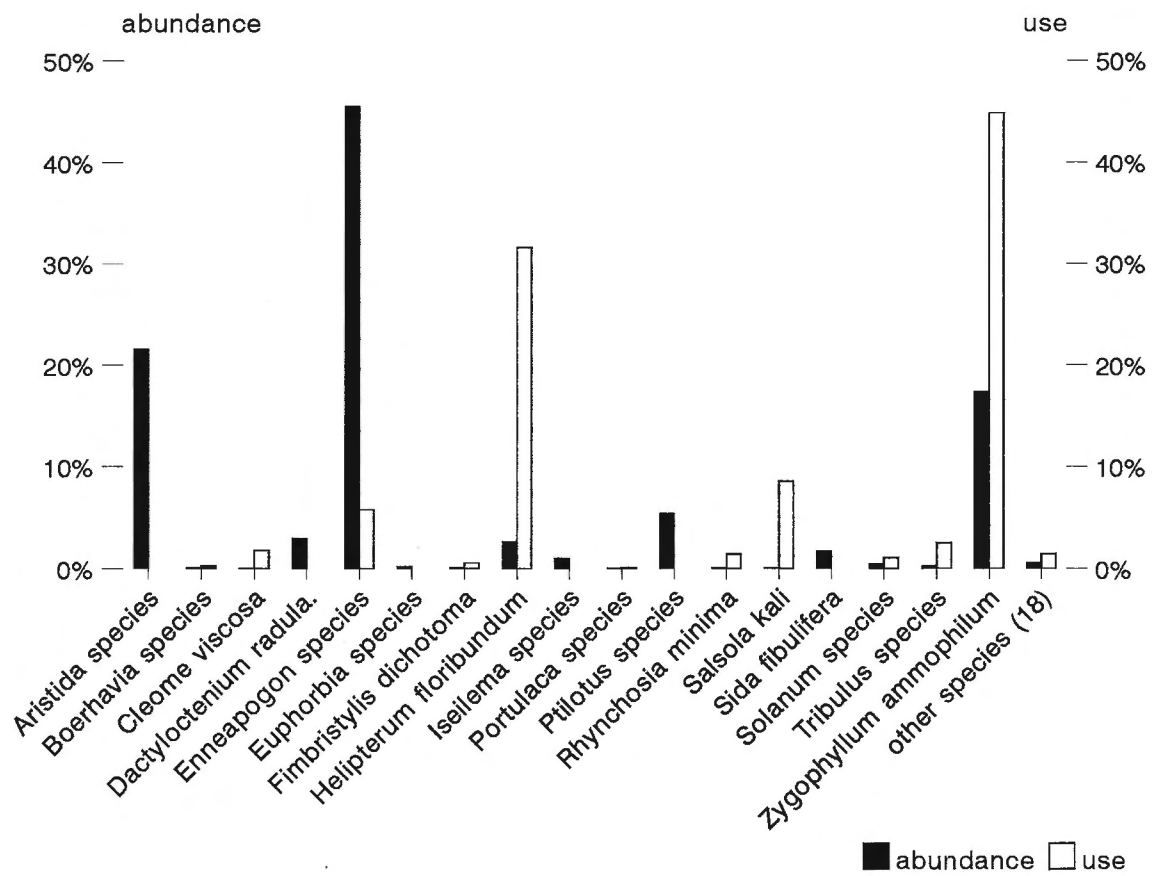


Fig. A9.3a: Comprehensive proportion rate of abundance and use



open plain, ground vegetation, winter

Fig. A9.3b: Comprehensive proportion rate of abundance and use



# Appendix

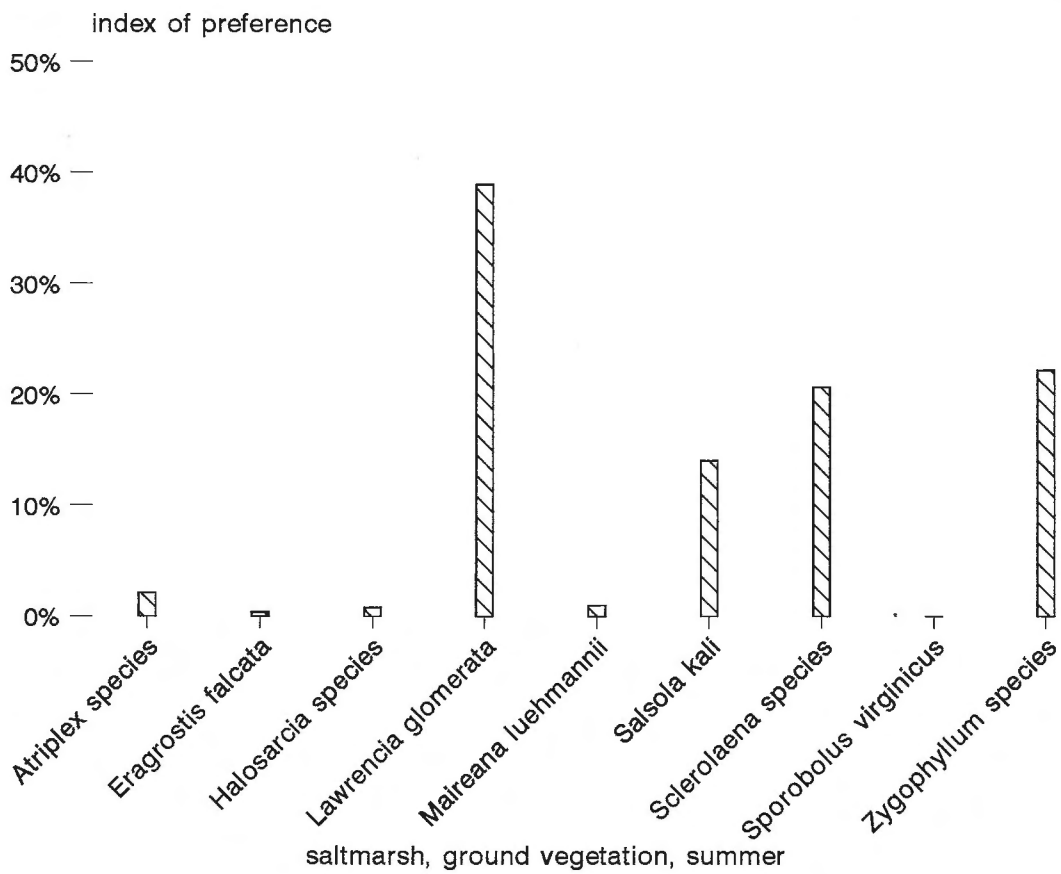
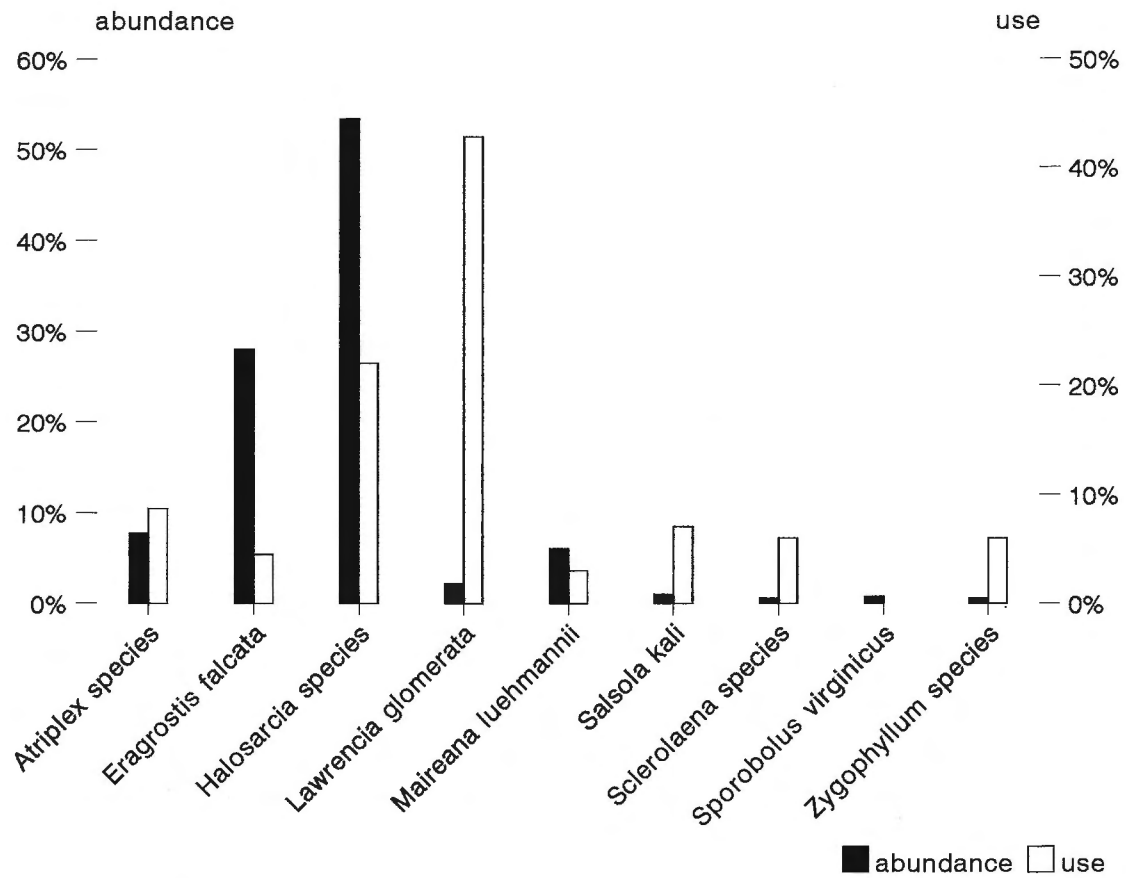
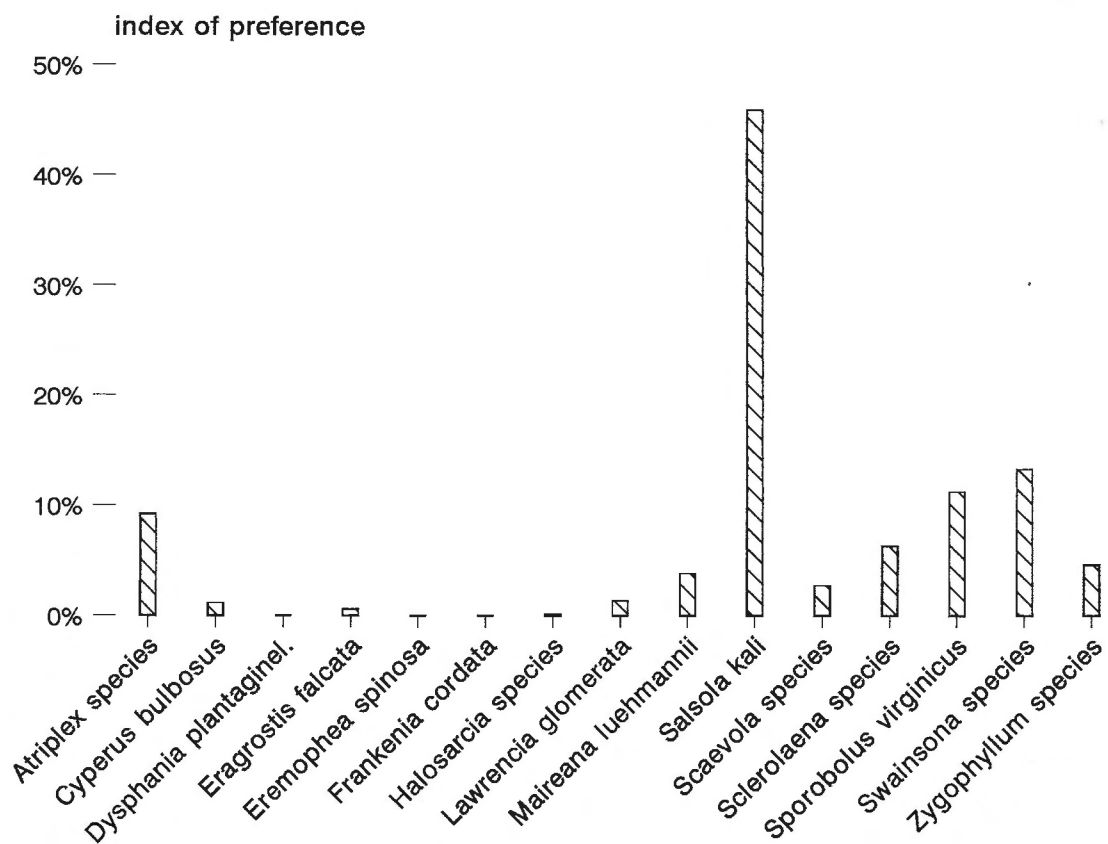
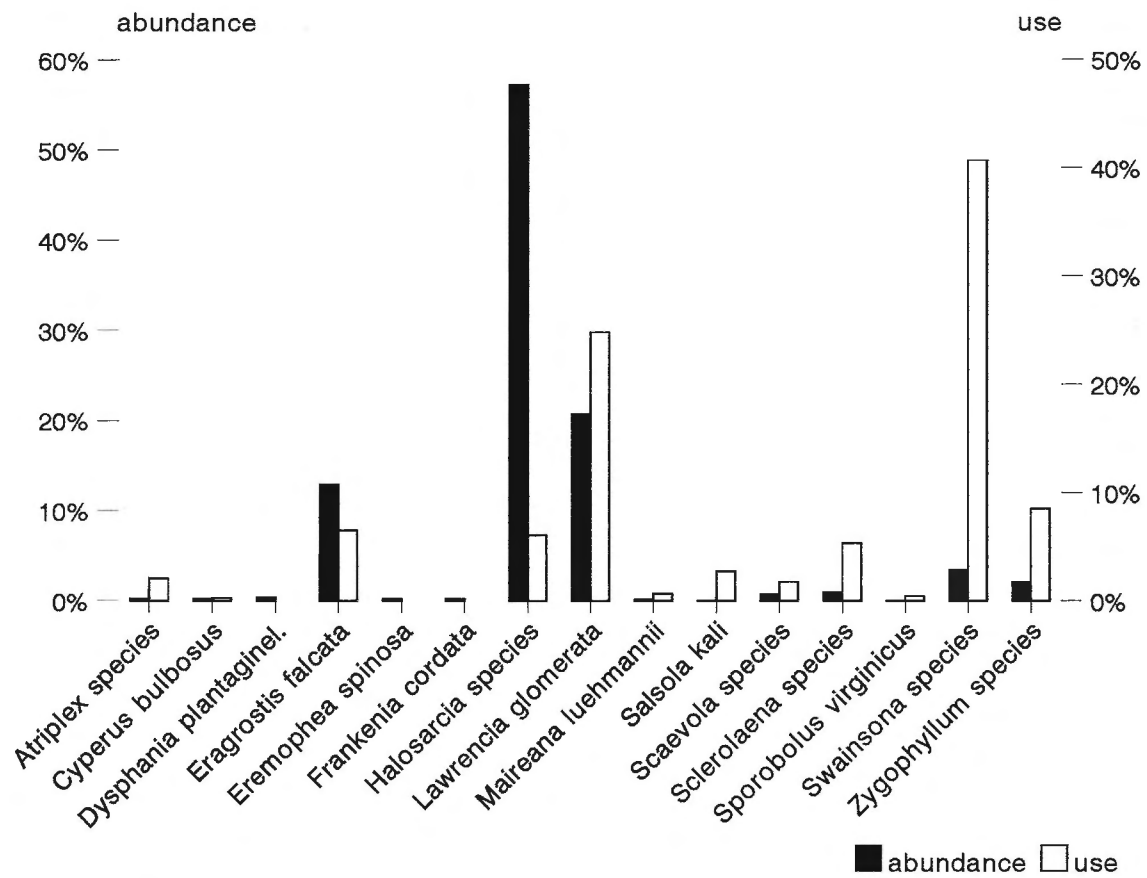


Fig. A9.4a: Comprehensive proportion rate of abundance and use



saltmarsh, ground vegetation, winter

Fig. A9.4b: Comprehensive proportion rate of abundance and use

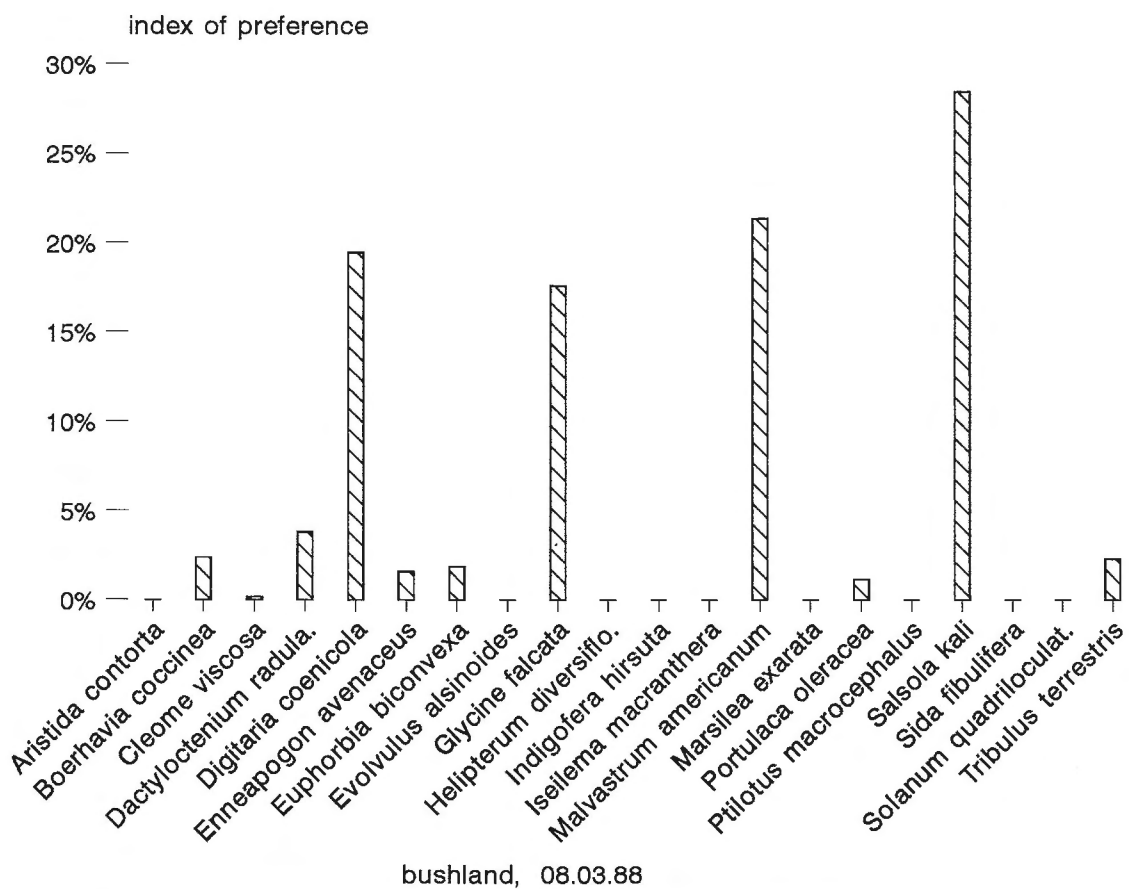
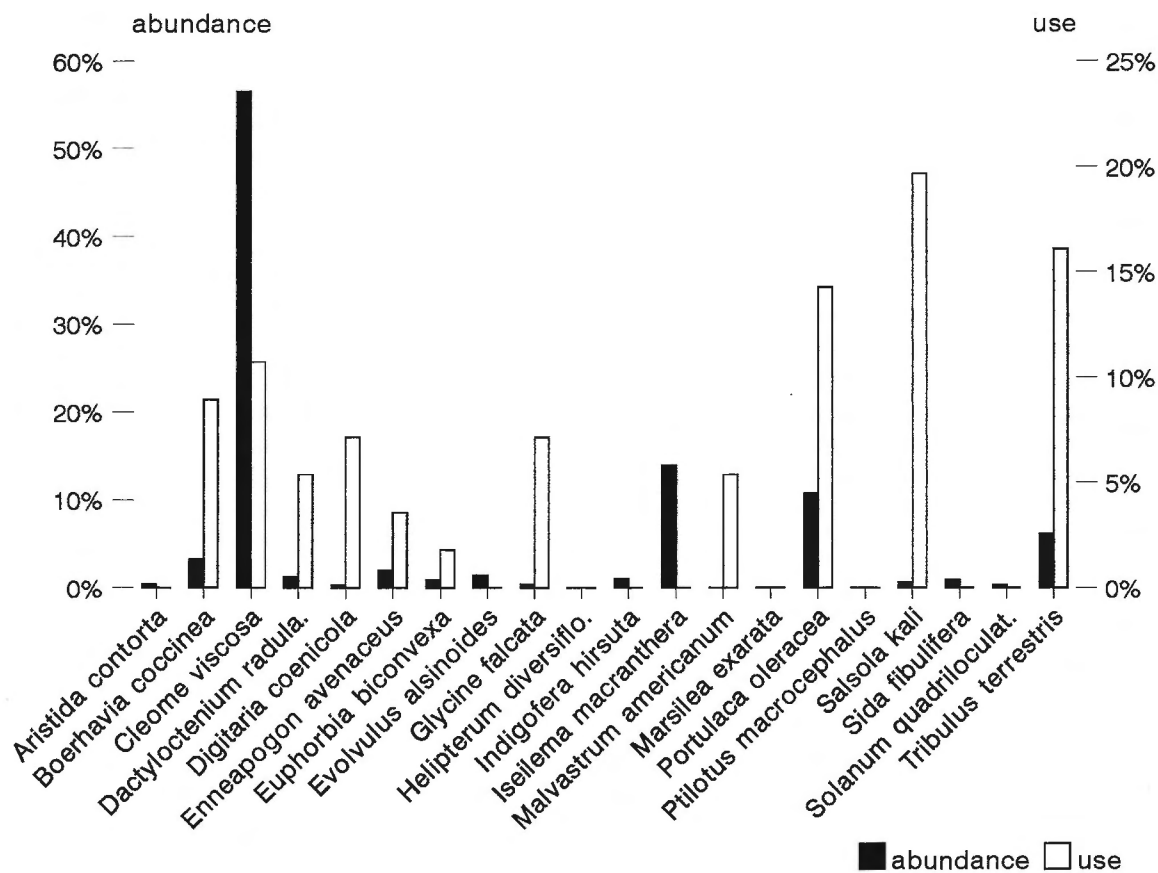
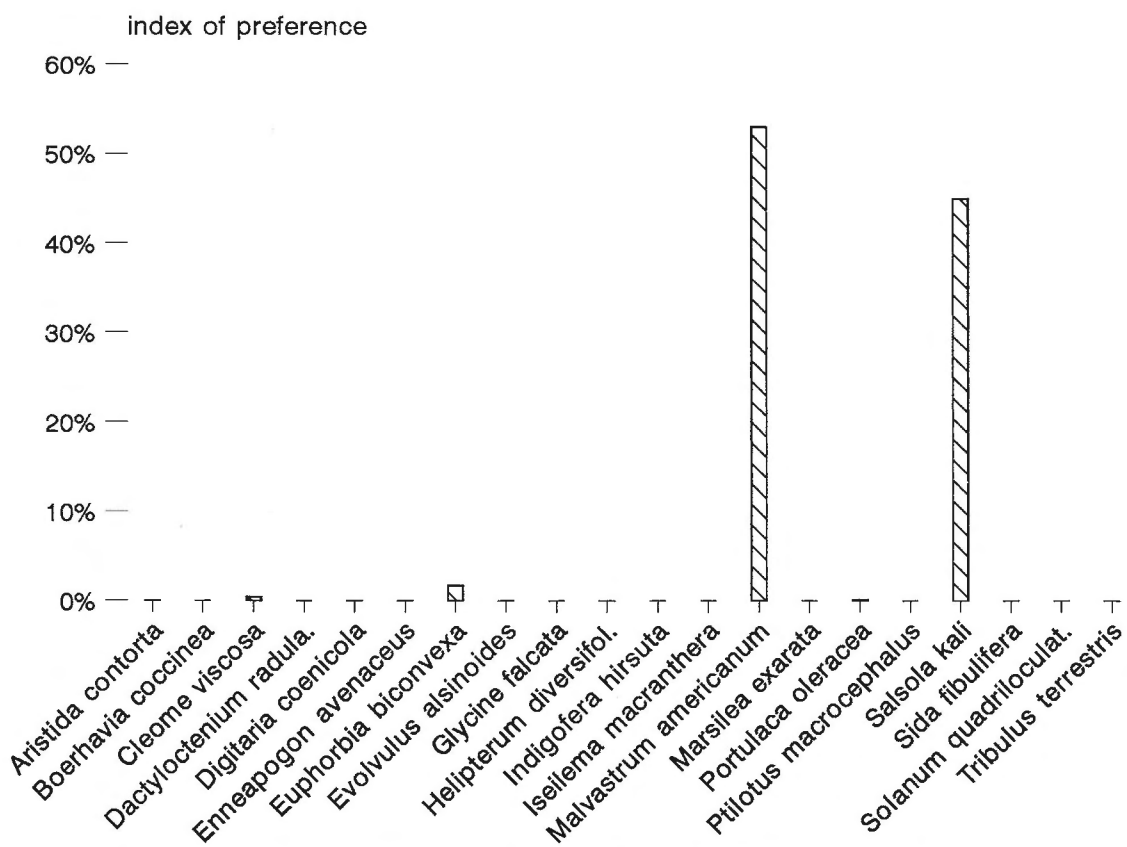
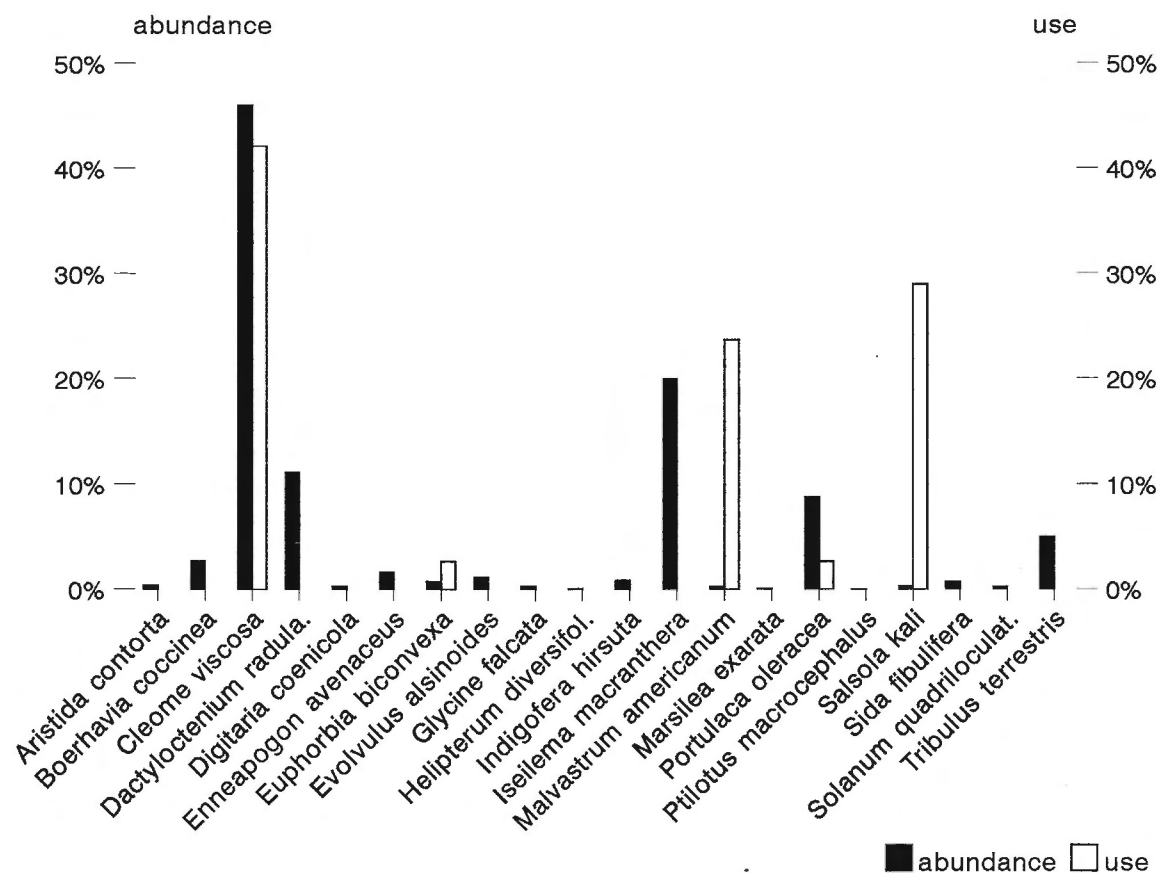
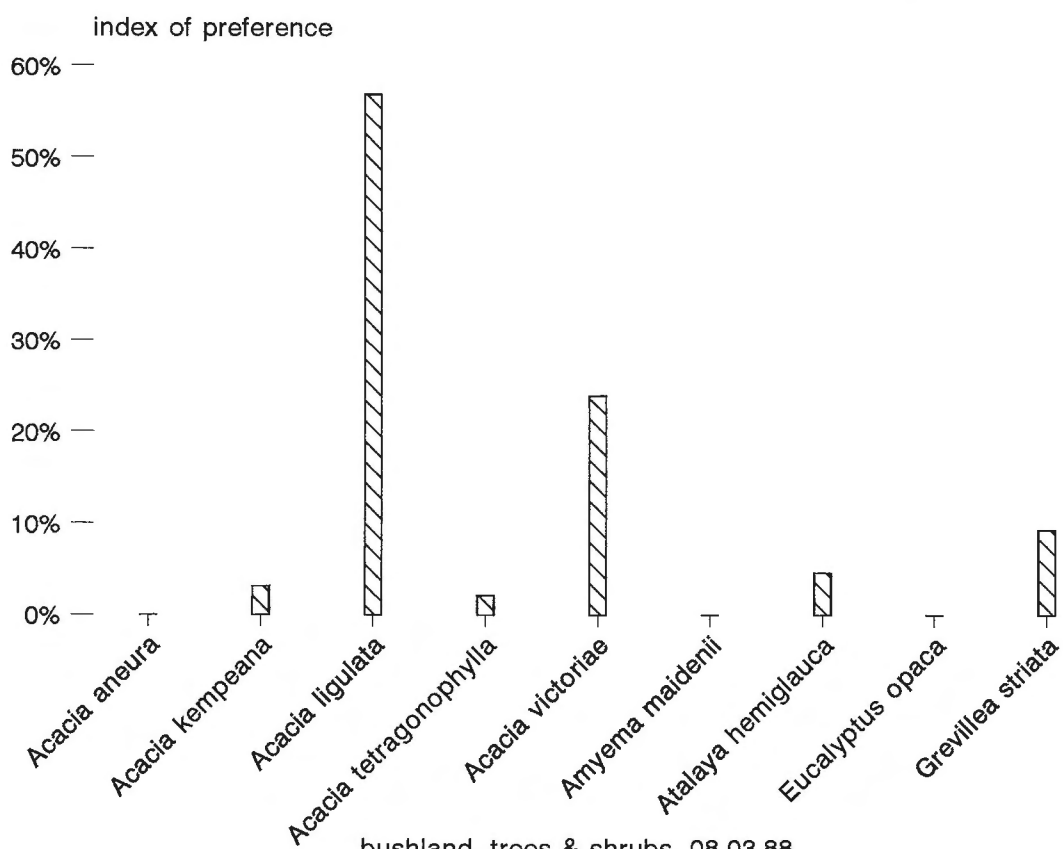
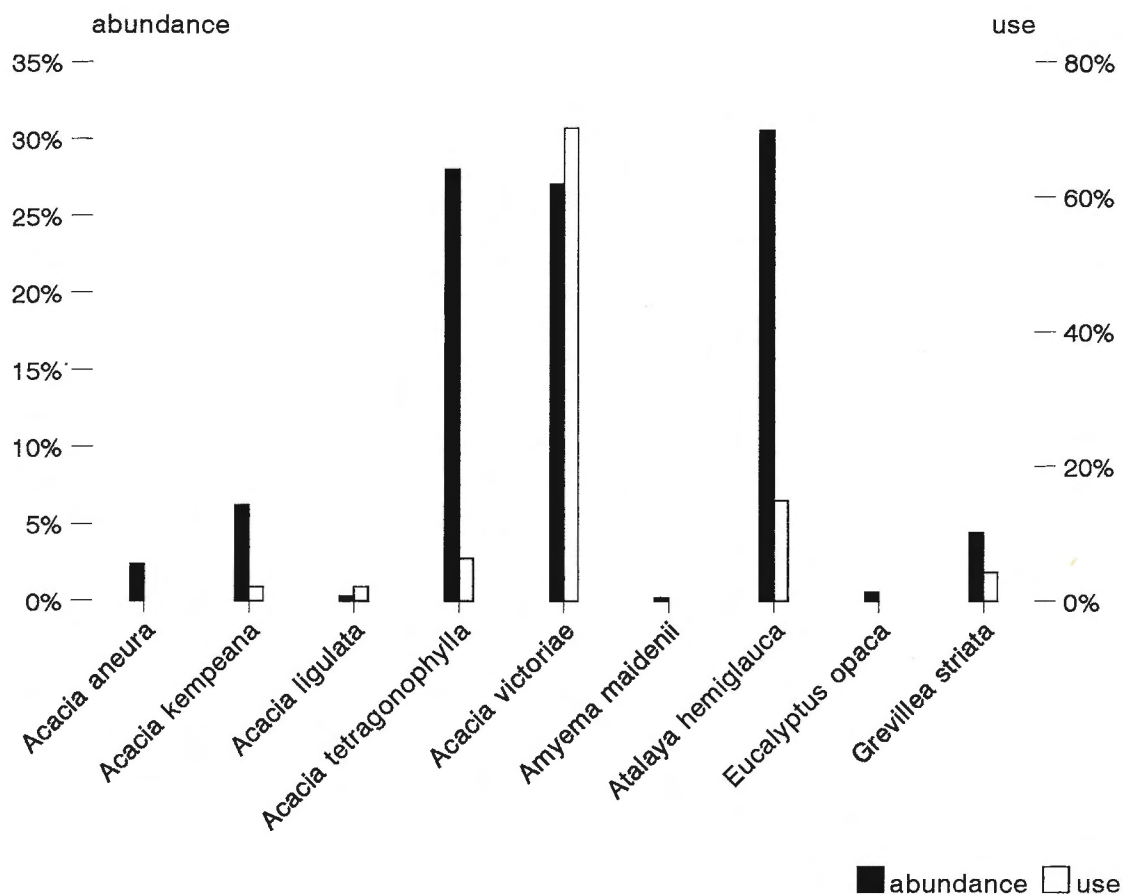


Fig. A9.5: Proportion rate of abundance and use - random sample



bushland, ground vegetation, 08.03.88

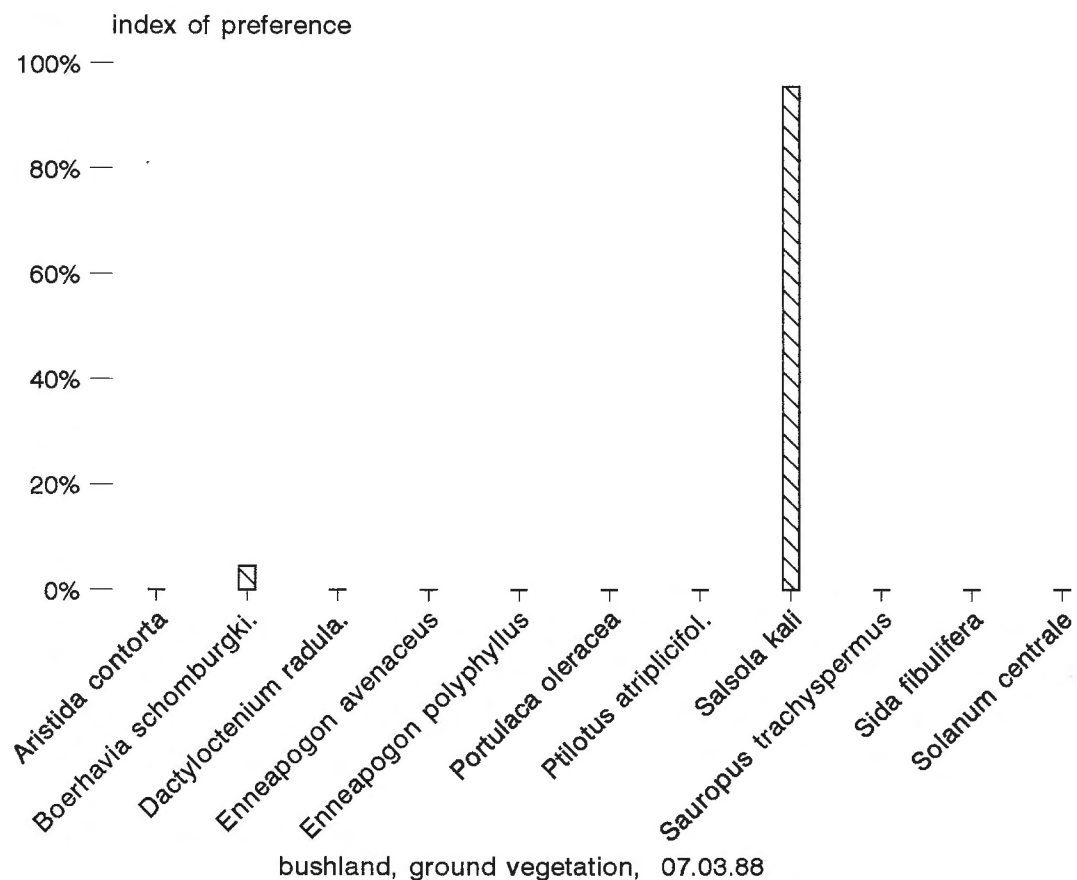
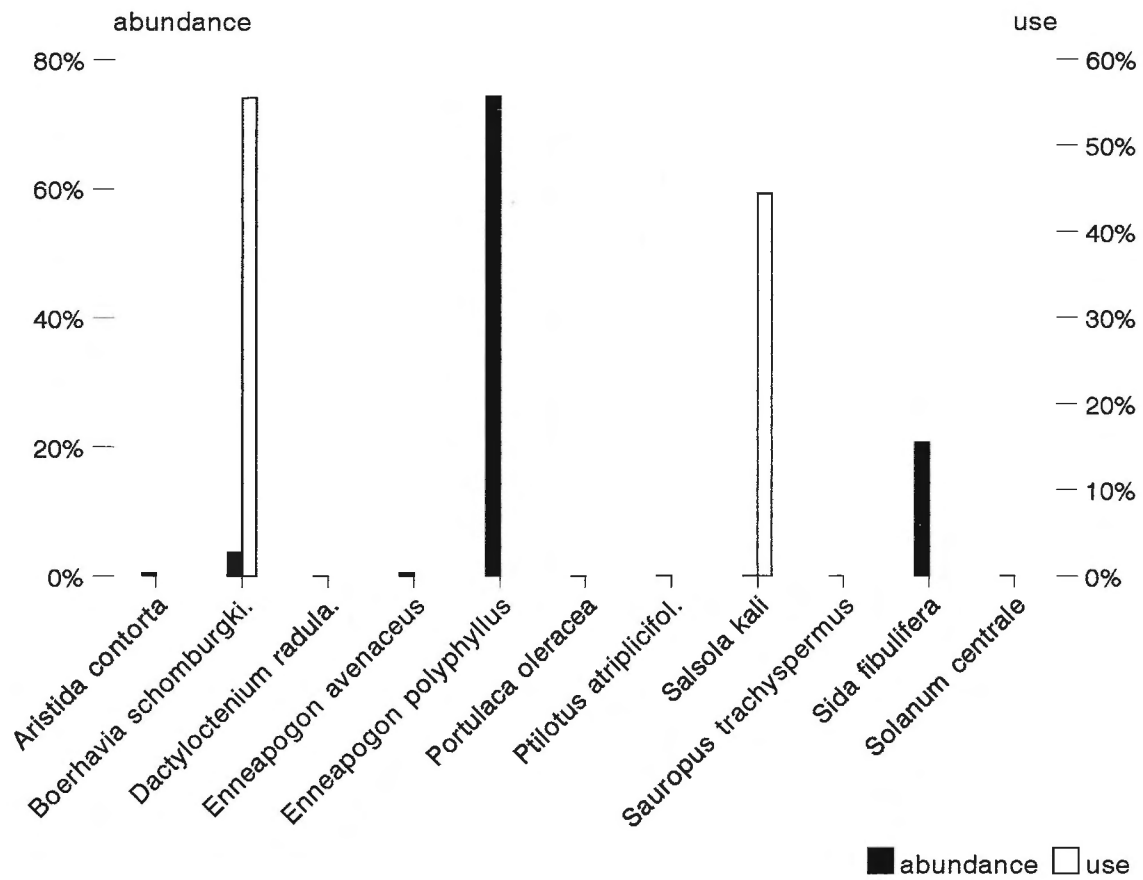
Fig. A9.6: Proportion rate of abundance and use - random sample



bushland, trees & shrubs, 08.03.88

Fig. A9.7: Proportion rate of abundance and use - random sample

# Appendix



bushland, ground vegetation, 07.03.88

Fig. A9.8: Proportion rate of abundance and use - random sample

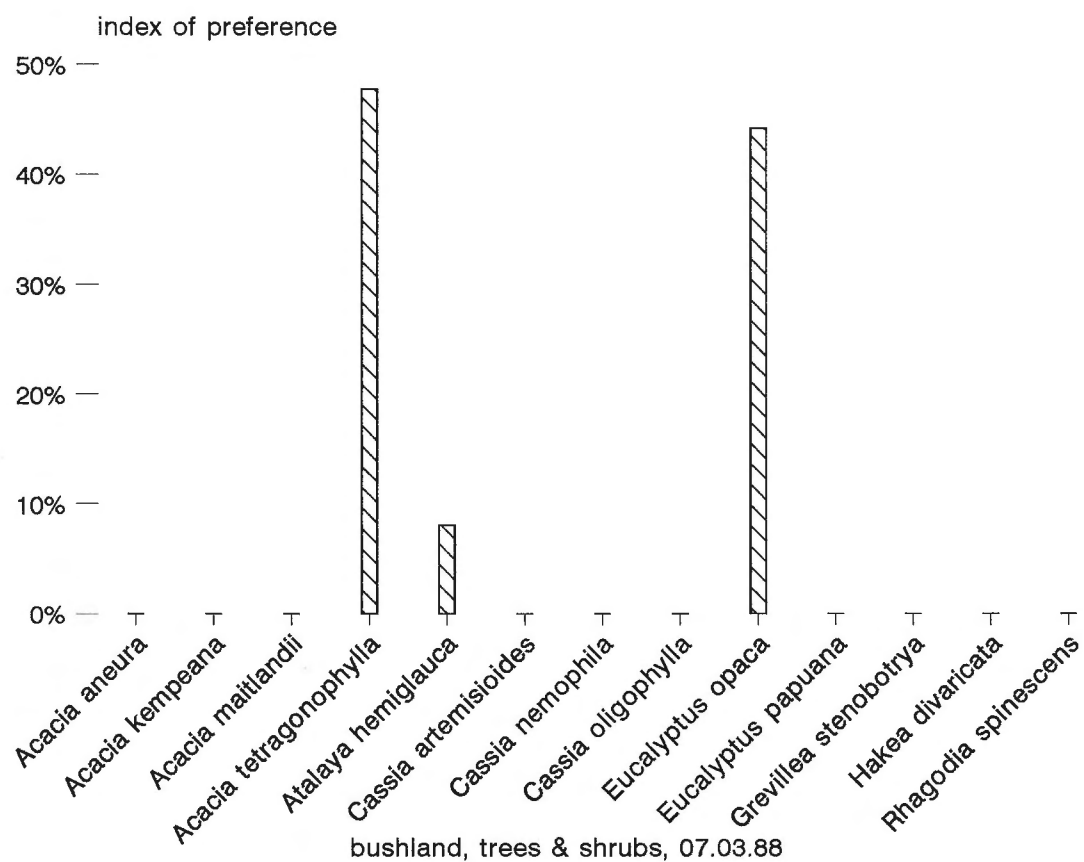
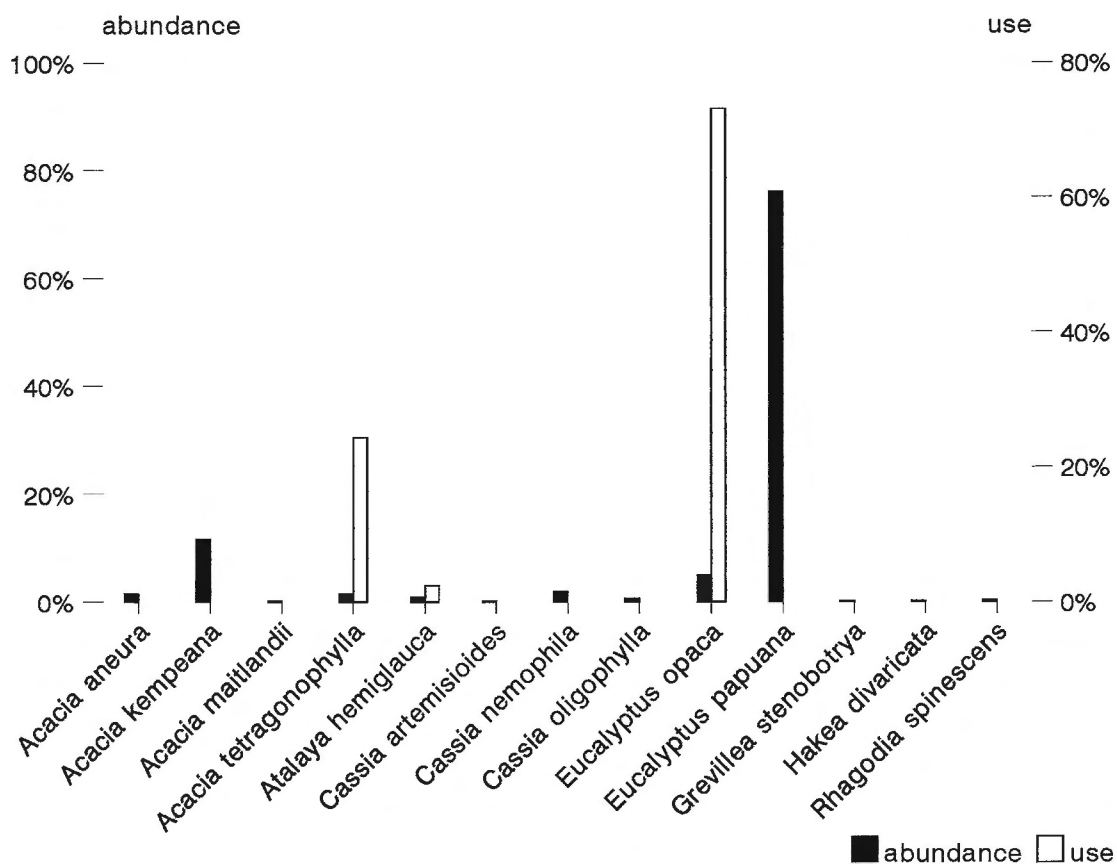
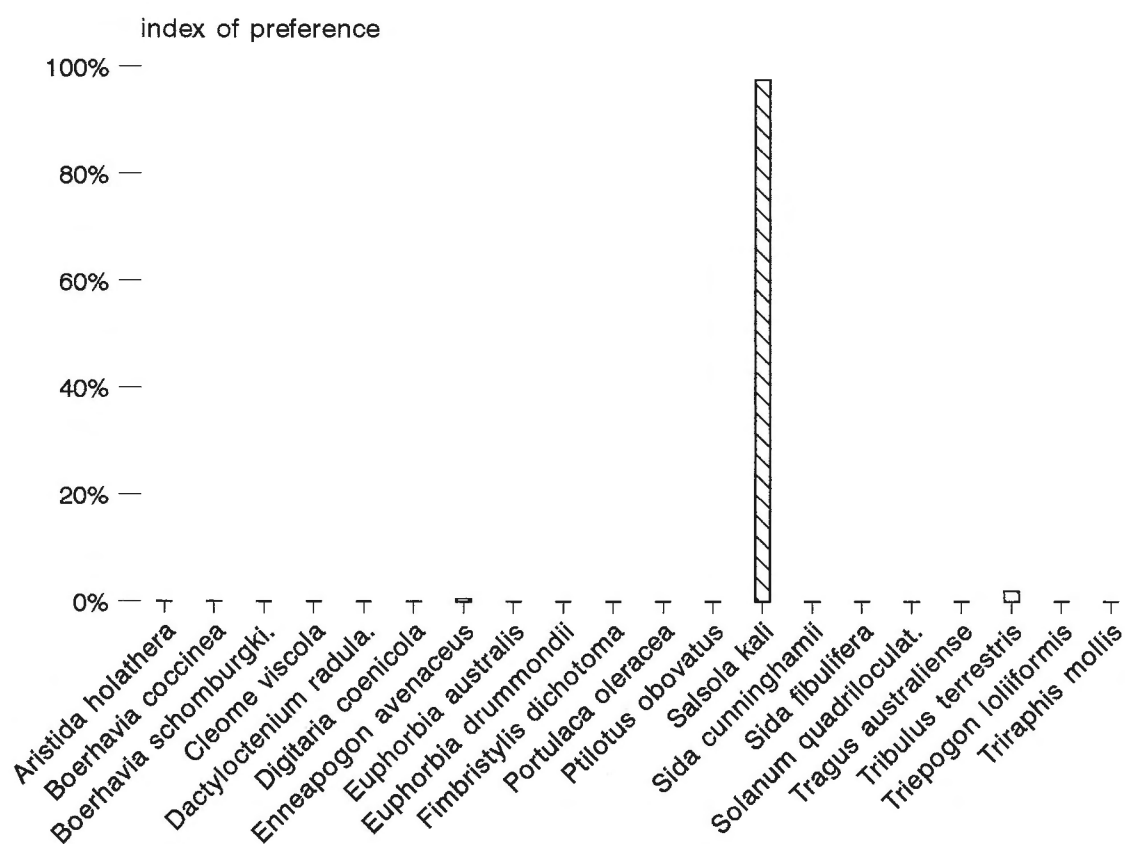
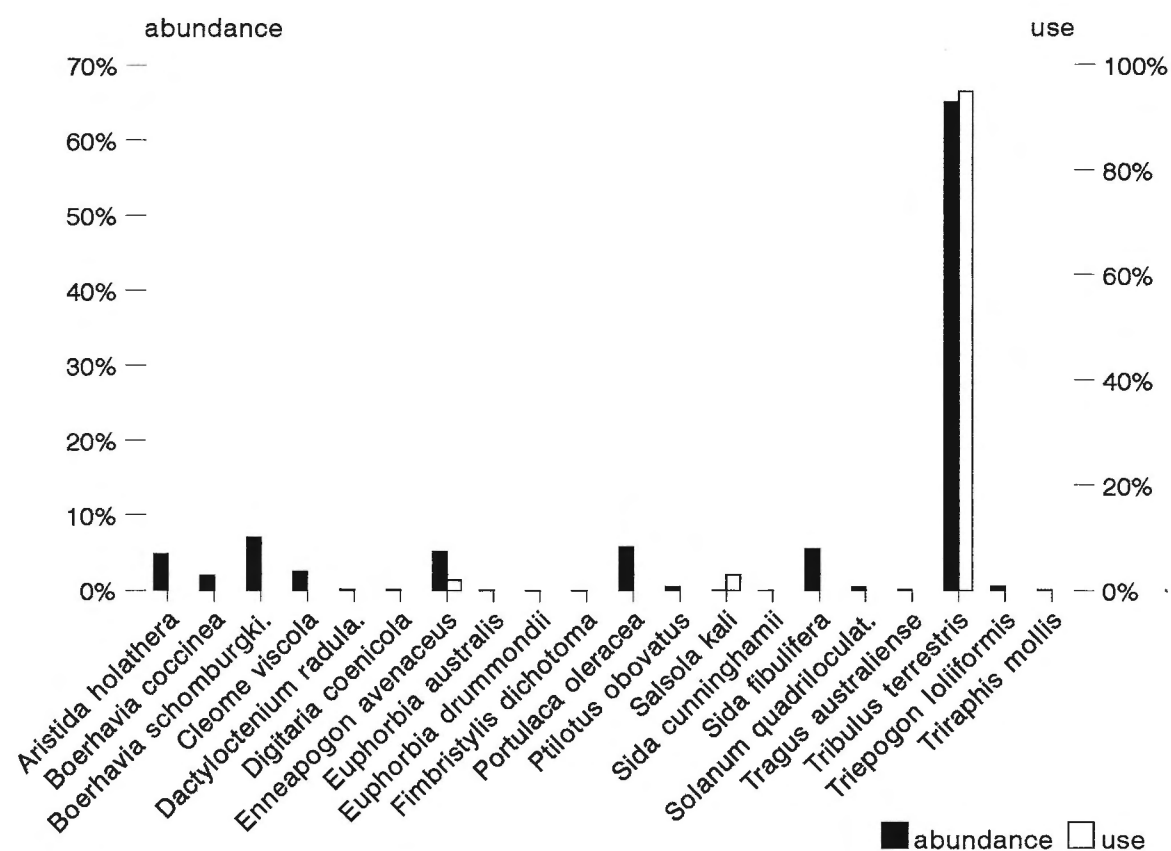


Fig. A9.9: Proportion rate of abundance and use - random sample

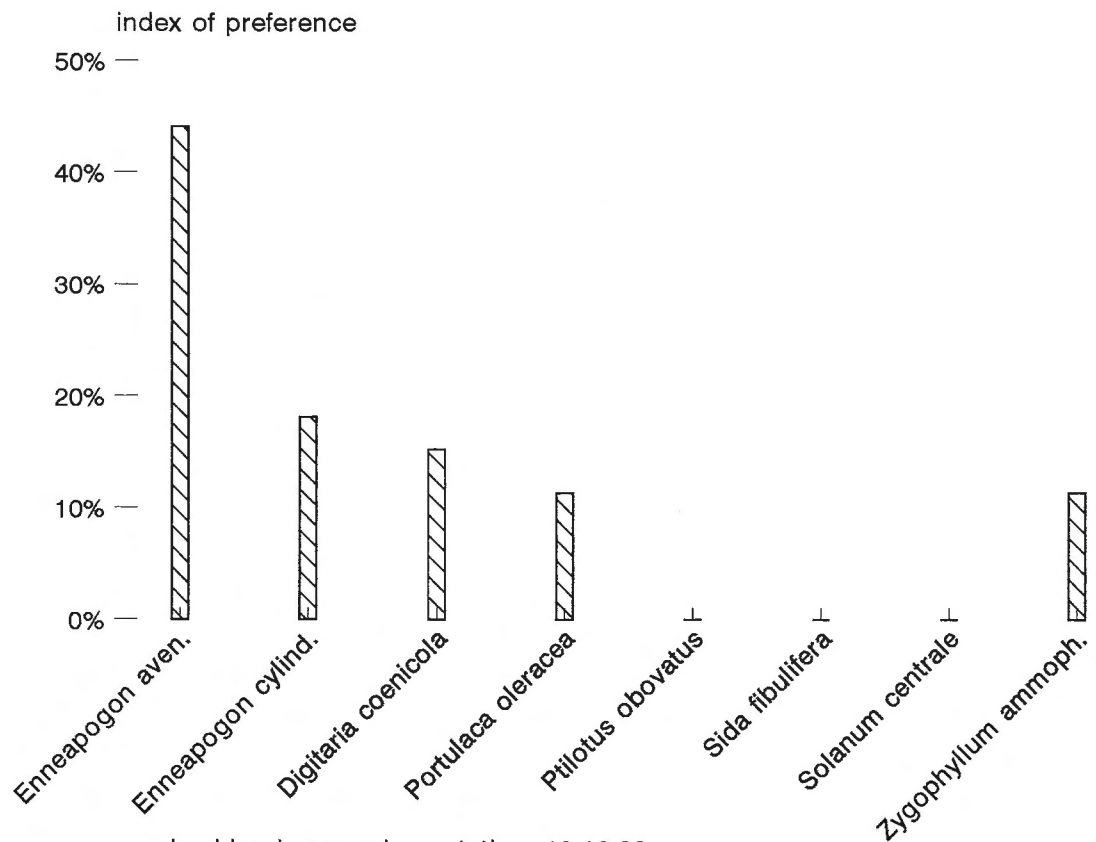
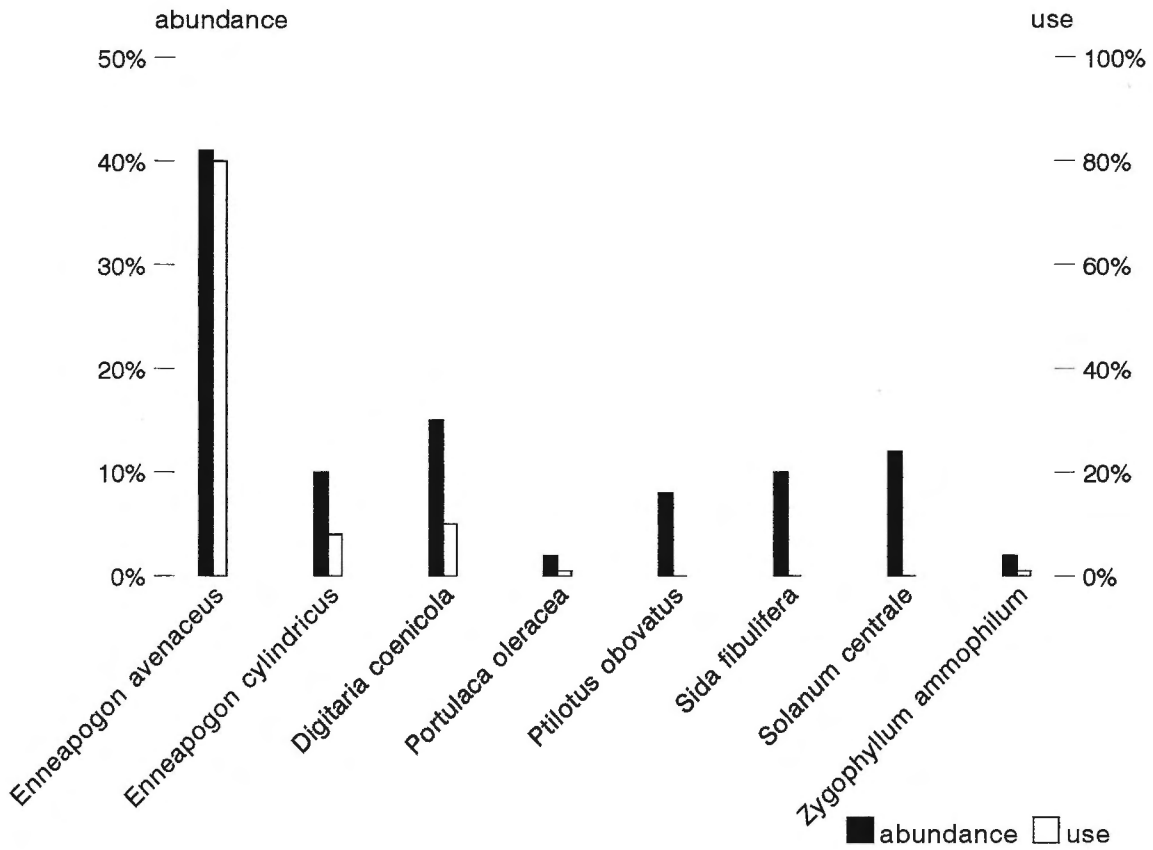


bushland, ground vegetation, 20.04.88

Fig. A9.10: Proportion rate of abundance and use - random sample

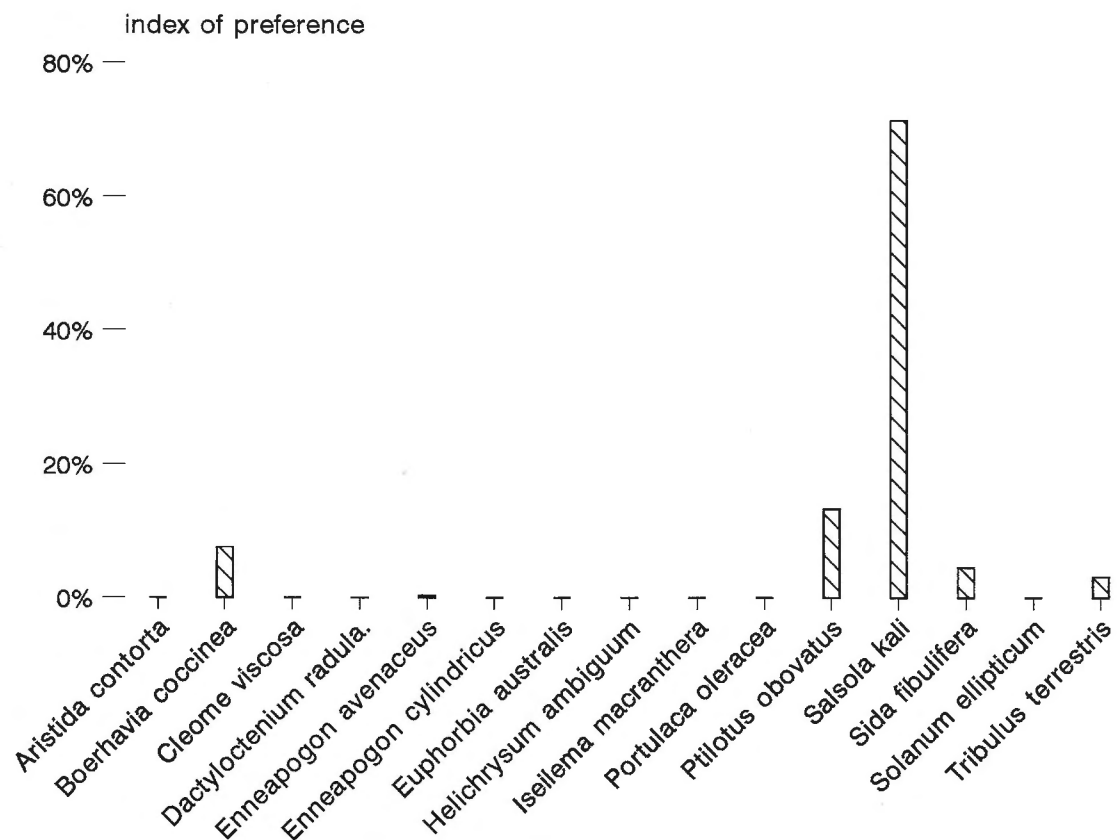
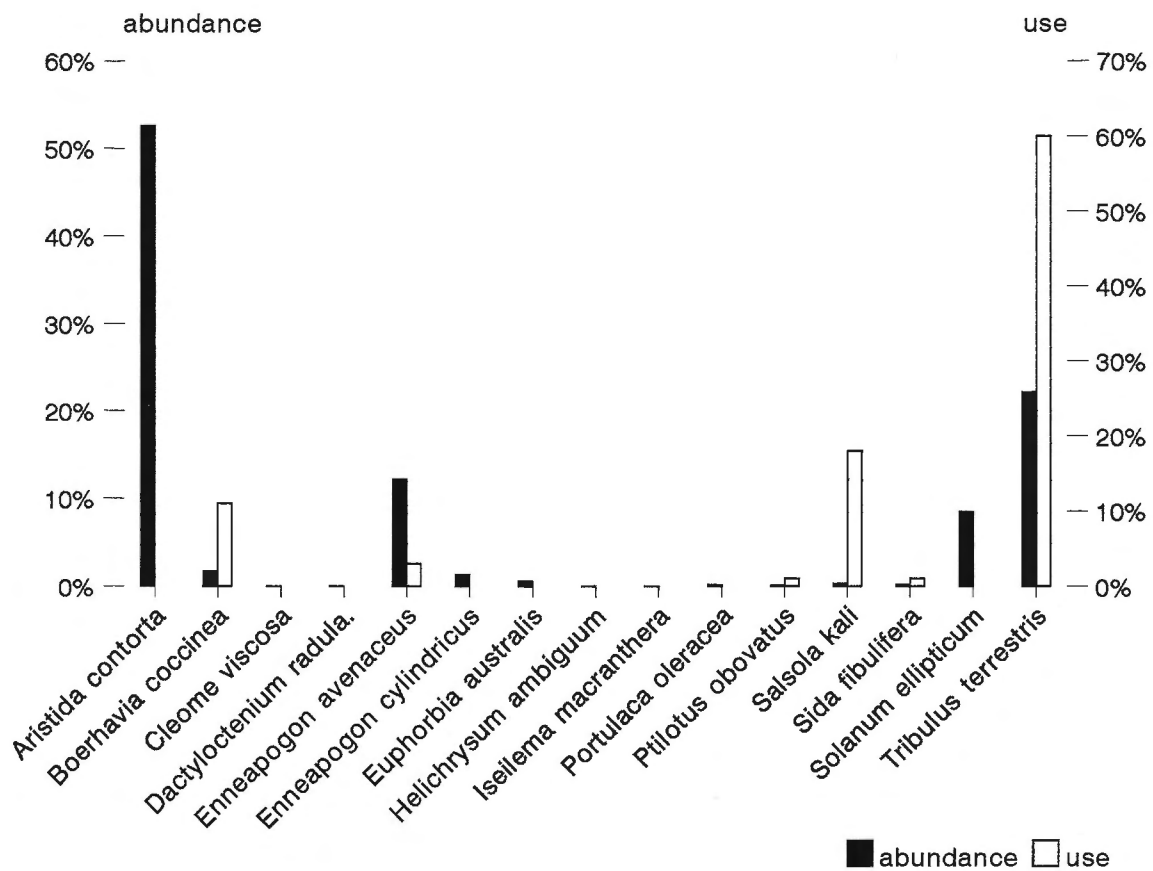


# Appendix



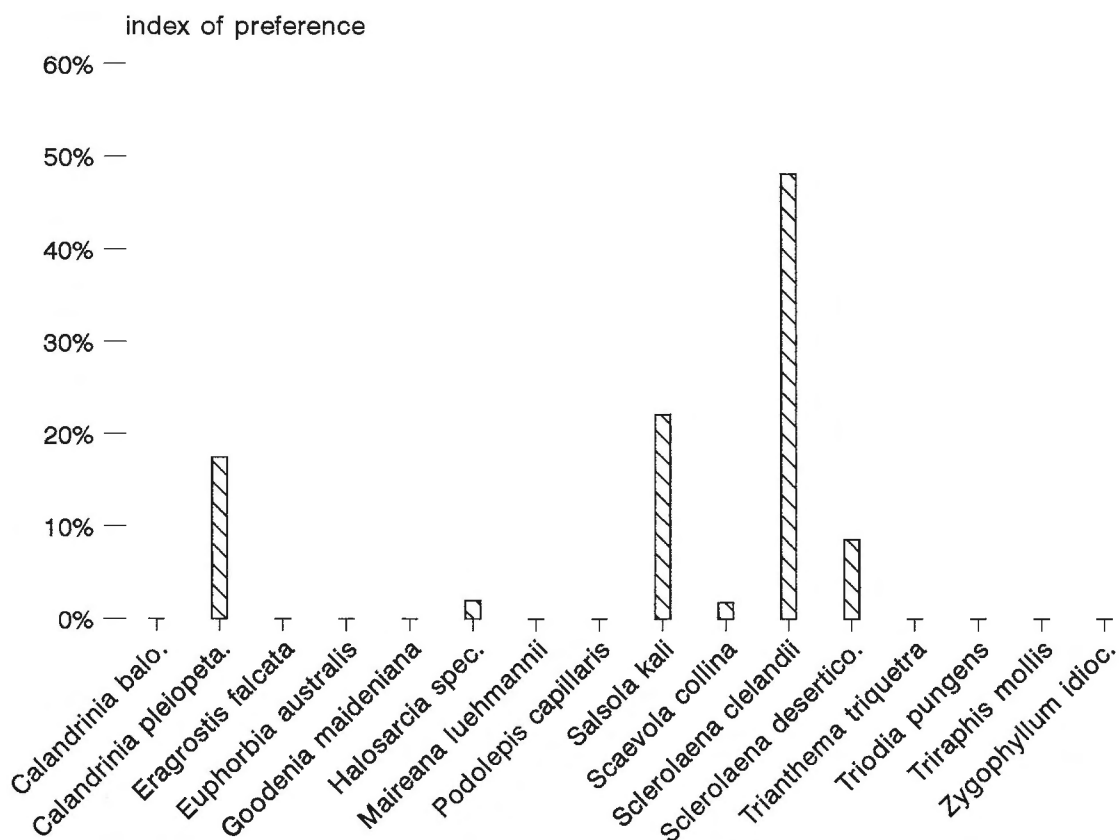
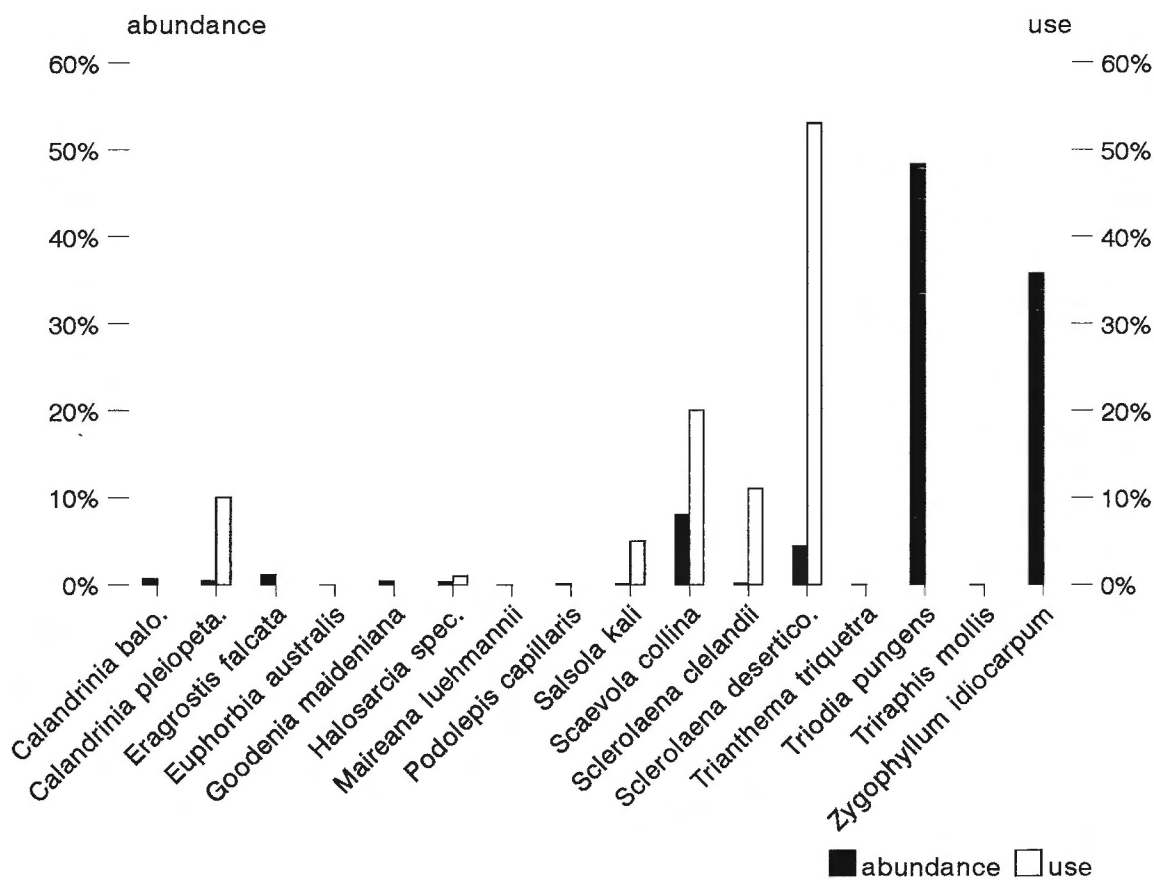
bushland, ground vegetation, 19.12.88

Fig. A9.11: Proportion rate of abundance and use - random sample



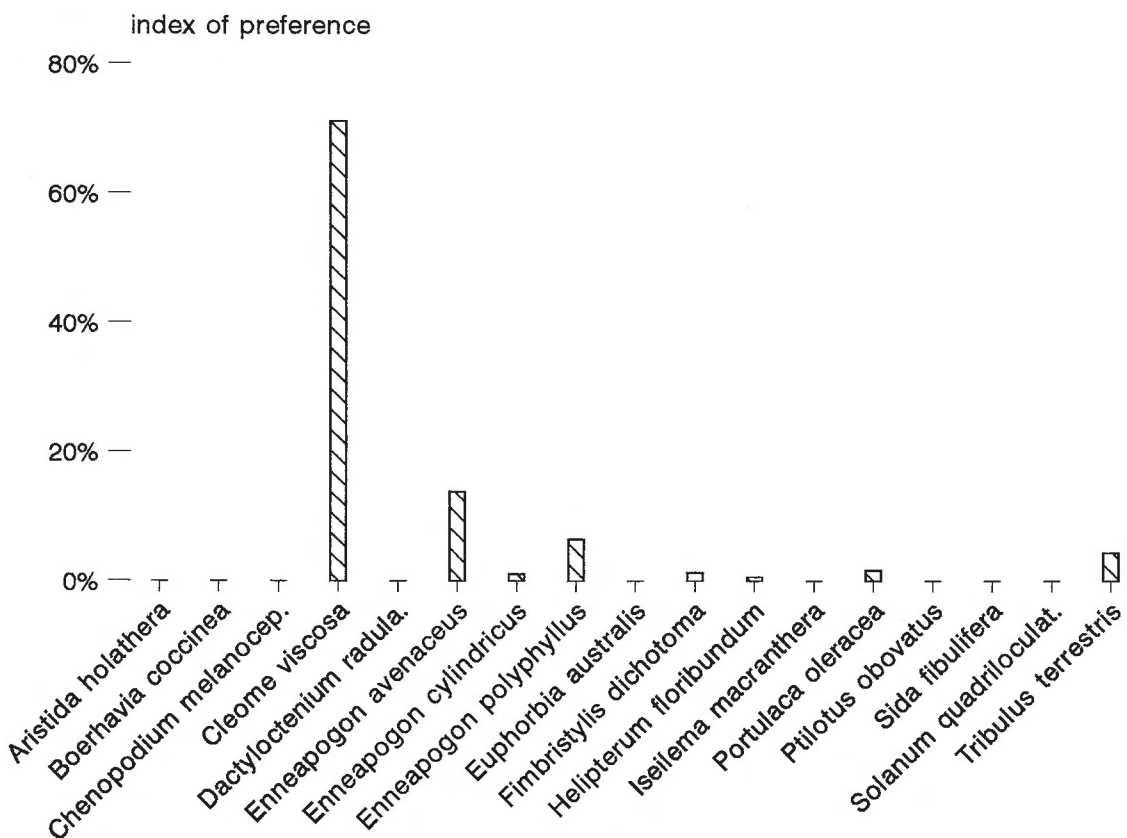
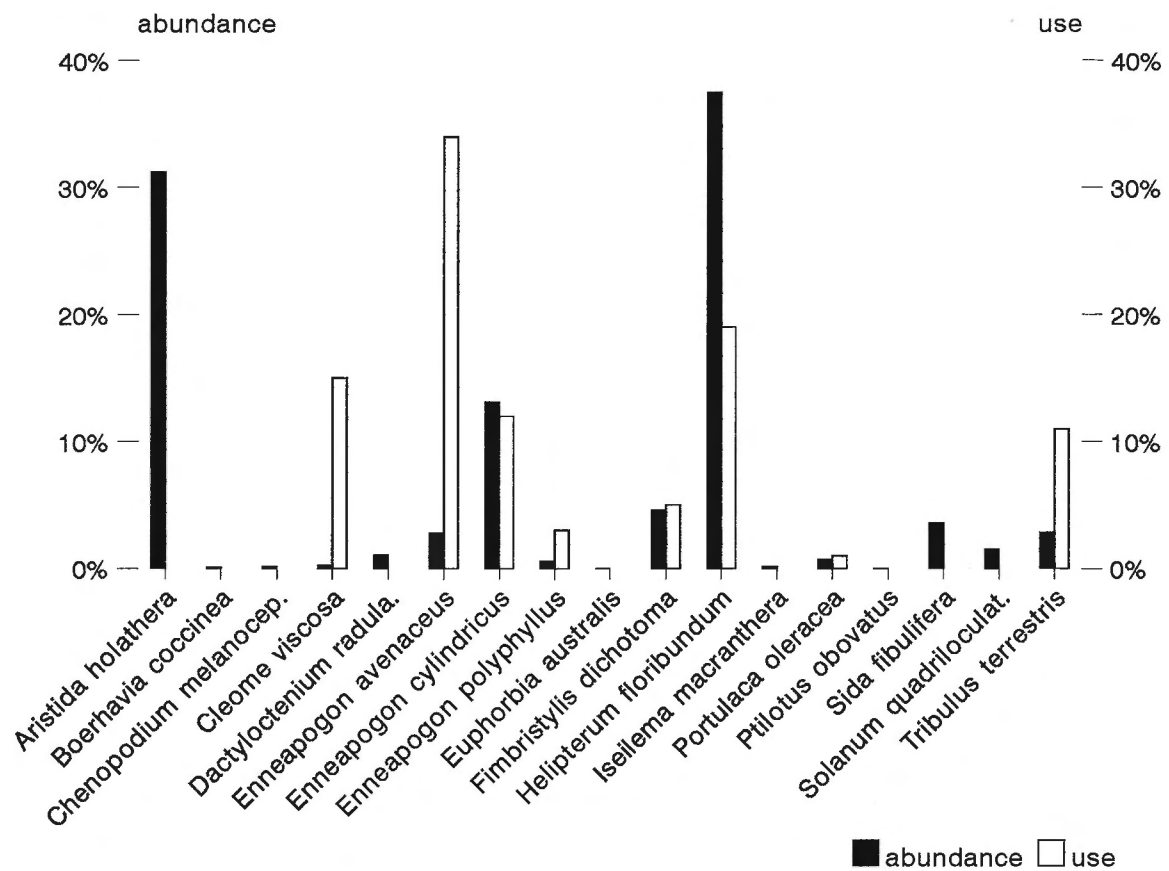
sandplain/dunes, ground vegetation, 19.04.88

Fig. A9.12: Proportion rate of abundance and use - random sample



saltmarsh - open sandplain, 22.05.88

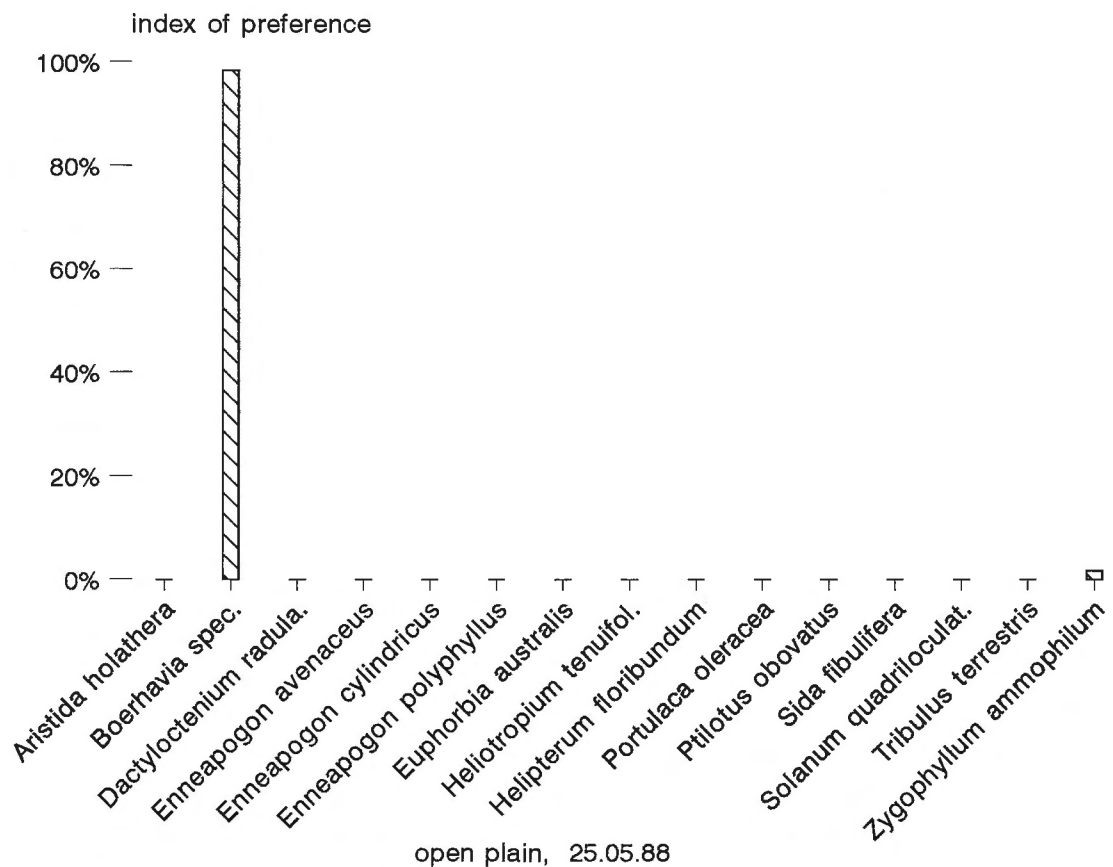
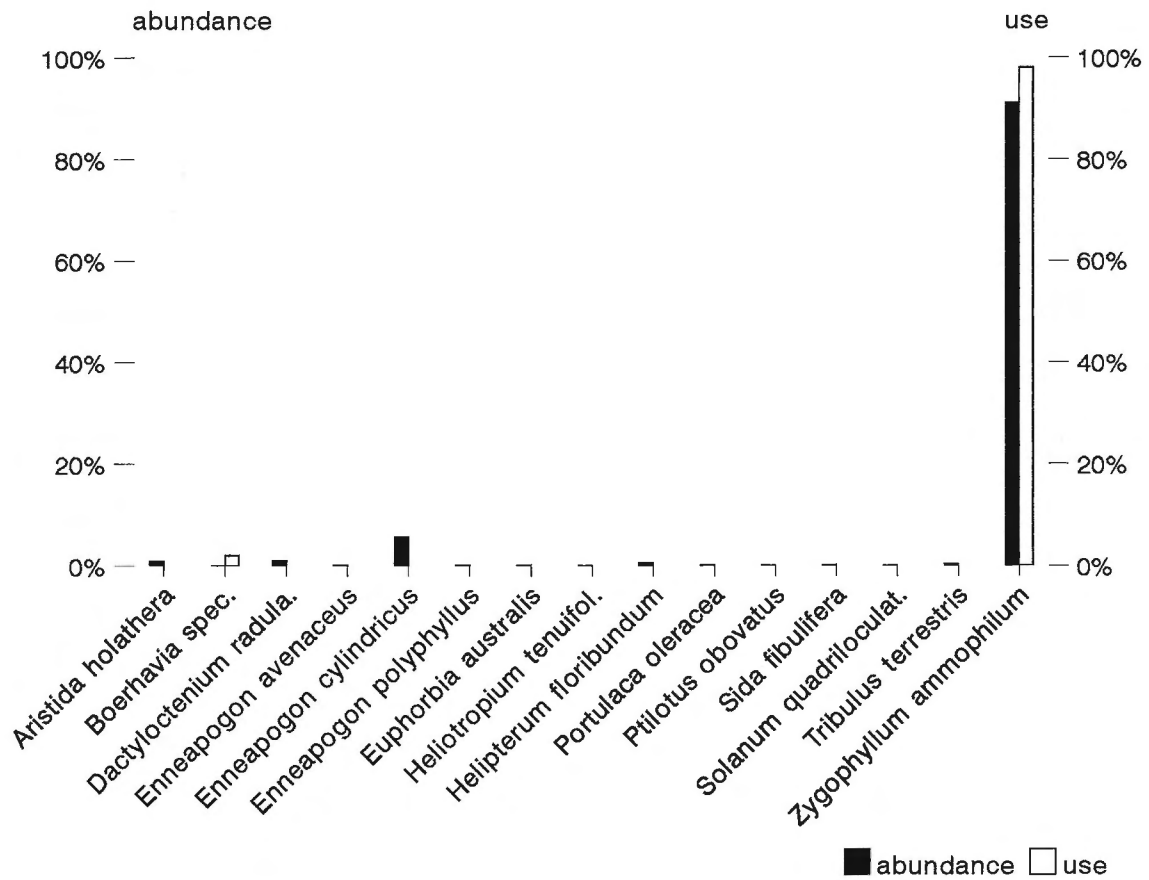
Fig. A9.13: Proportion rate of abundance and use - random sample



open plain, 26.05.88

Fig. A9.14: Proportion rate of abundance and use - random sample

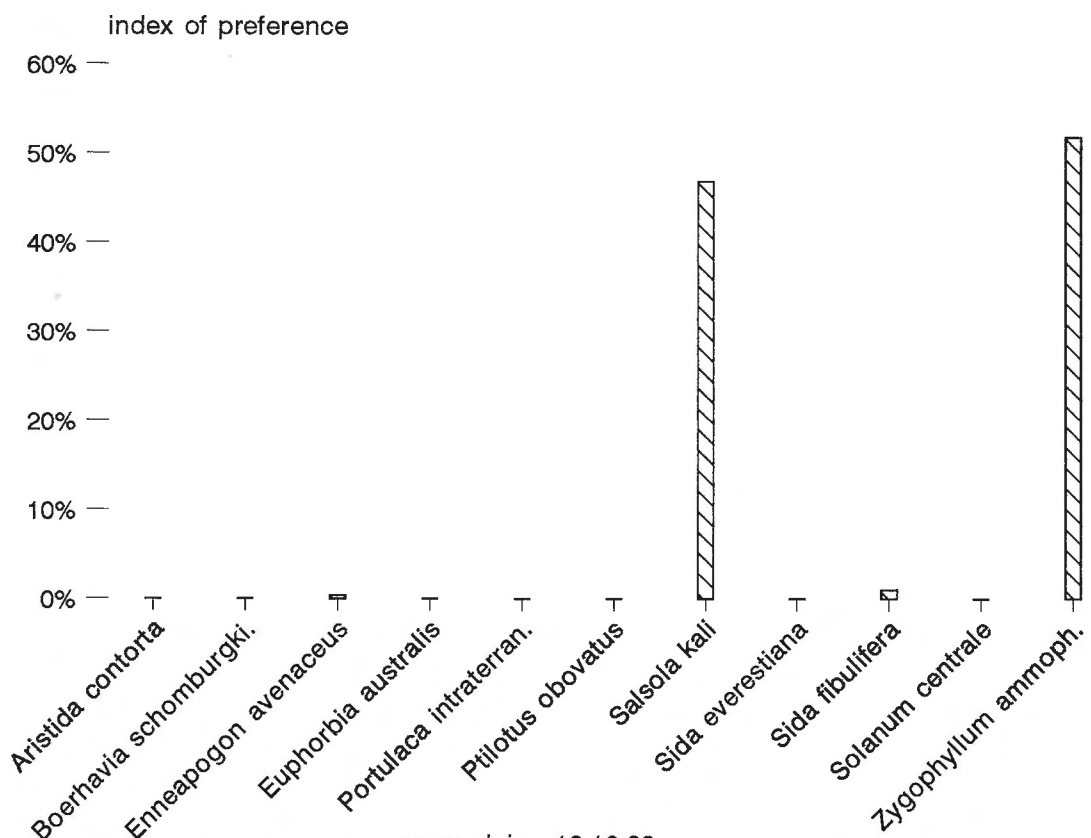
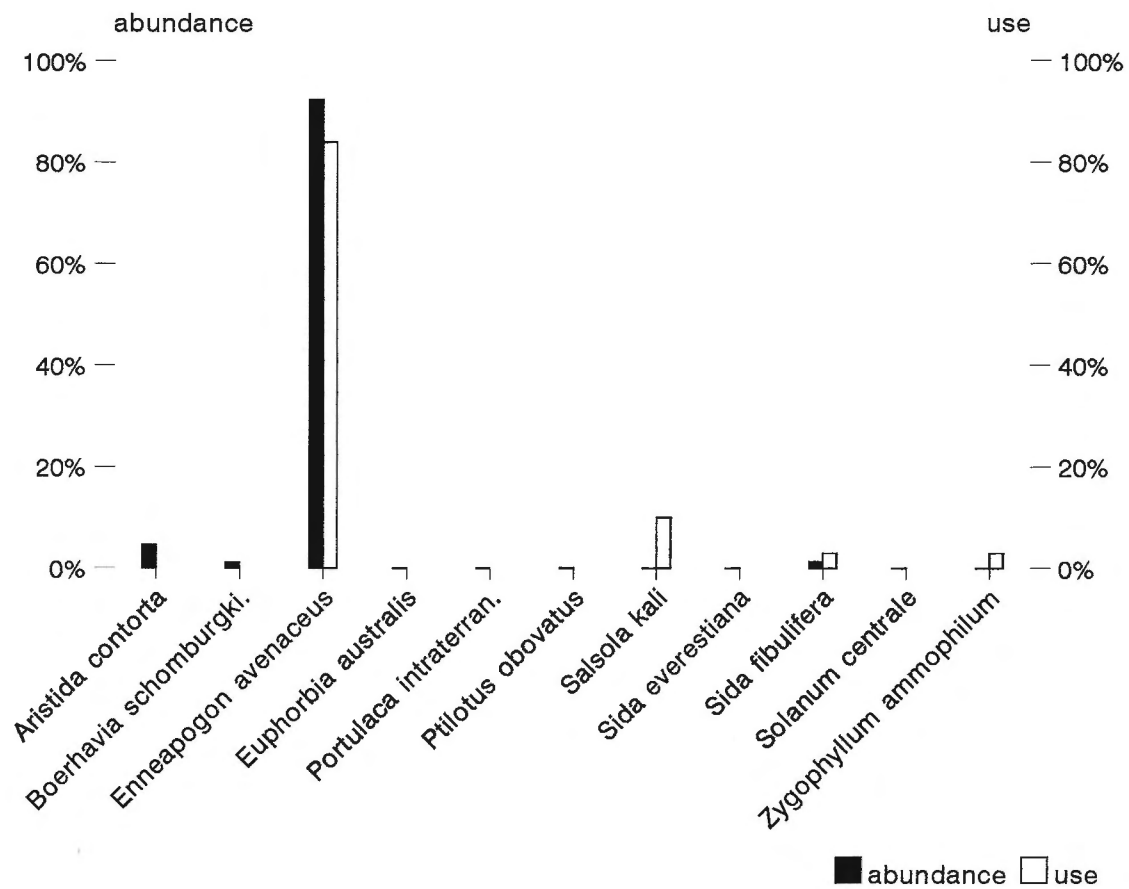
# Appendix



open plain, 25.05.88

Fig. A9.15: Proportion rate of abundance and use - random sample

# Appendix



open plain, 16.12.88

Fig. A9.16: Proportion rate of abundance and use - random sample

# Appendix

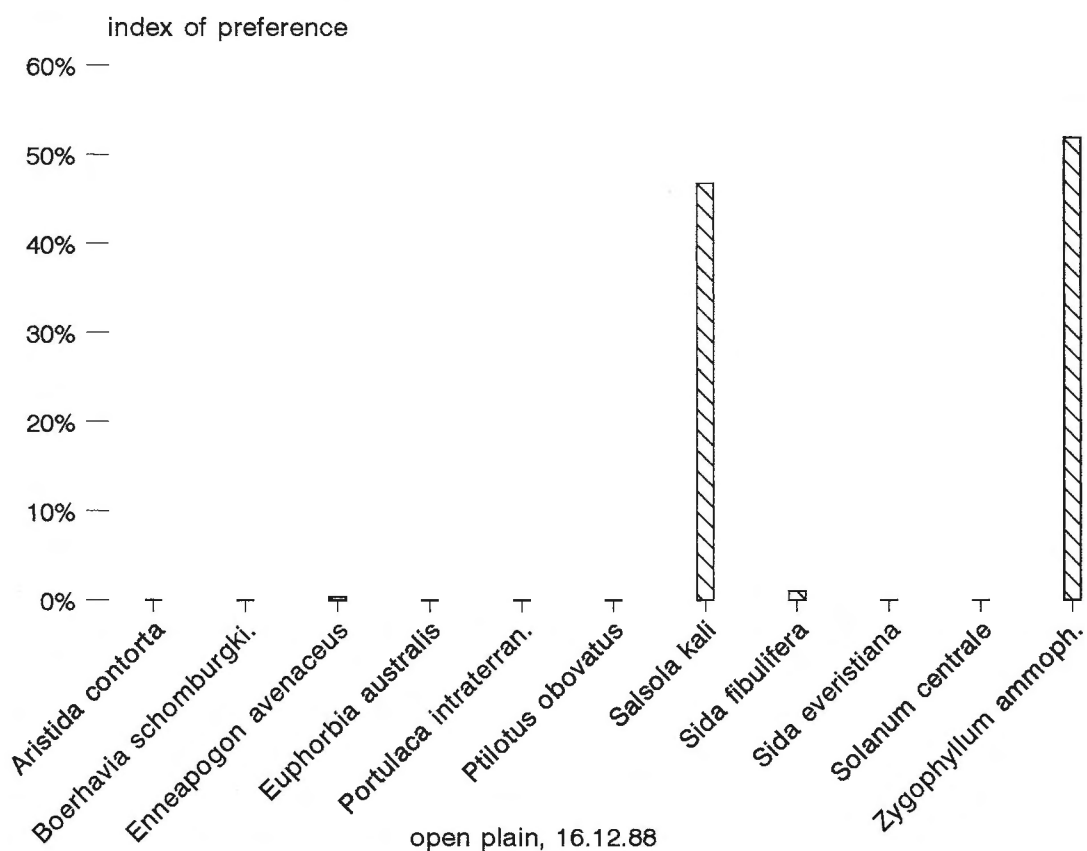
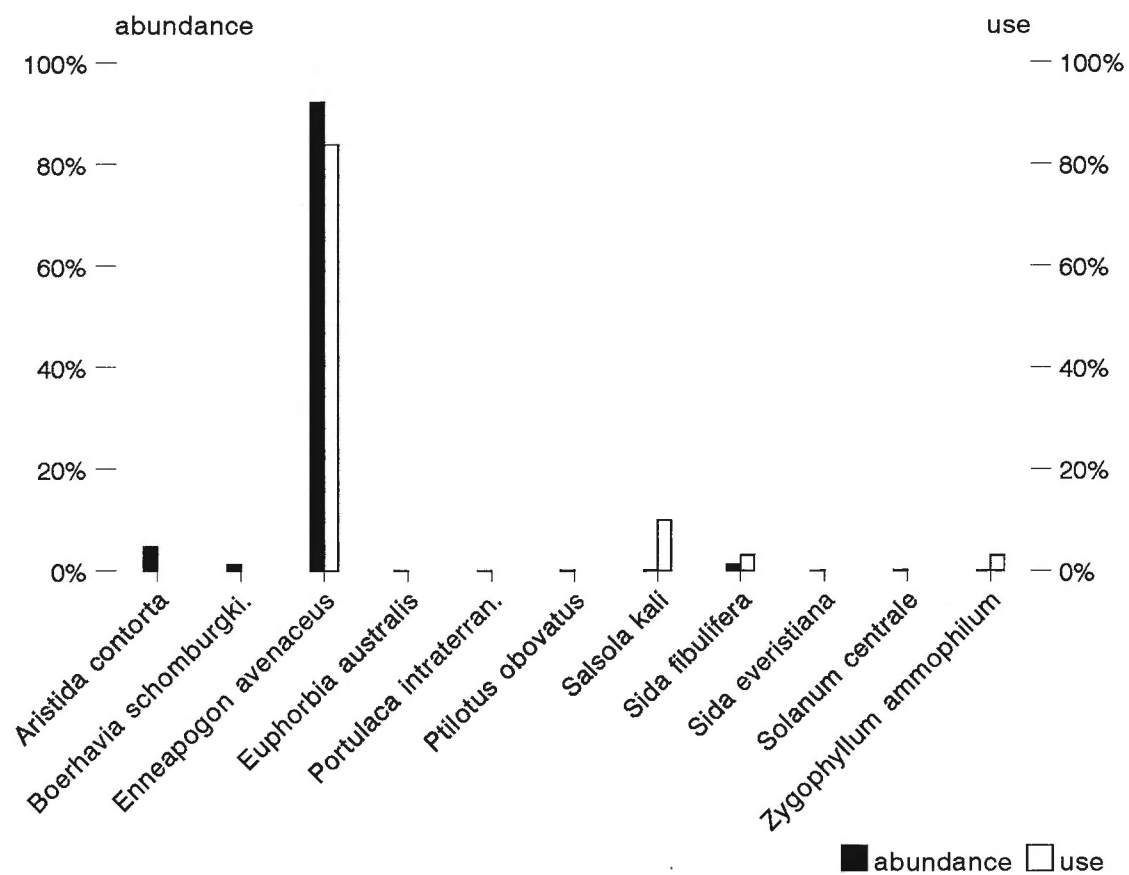


Fig. A9.17: Proportion rate of abundance and use - random sample

# Appendix

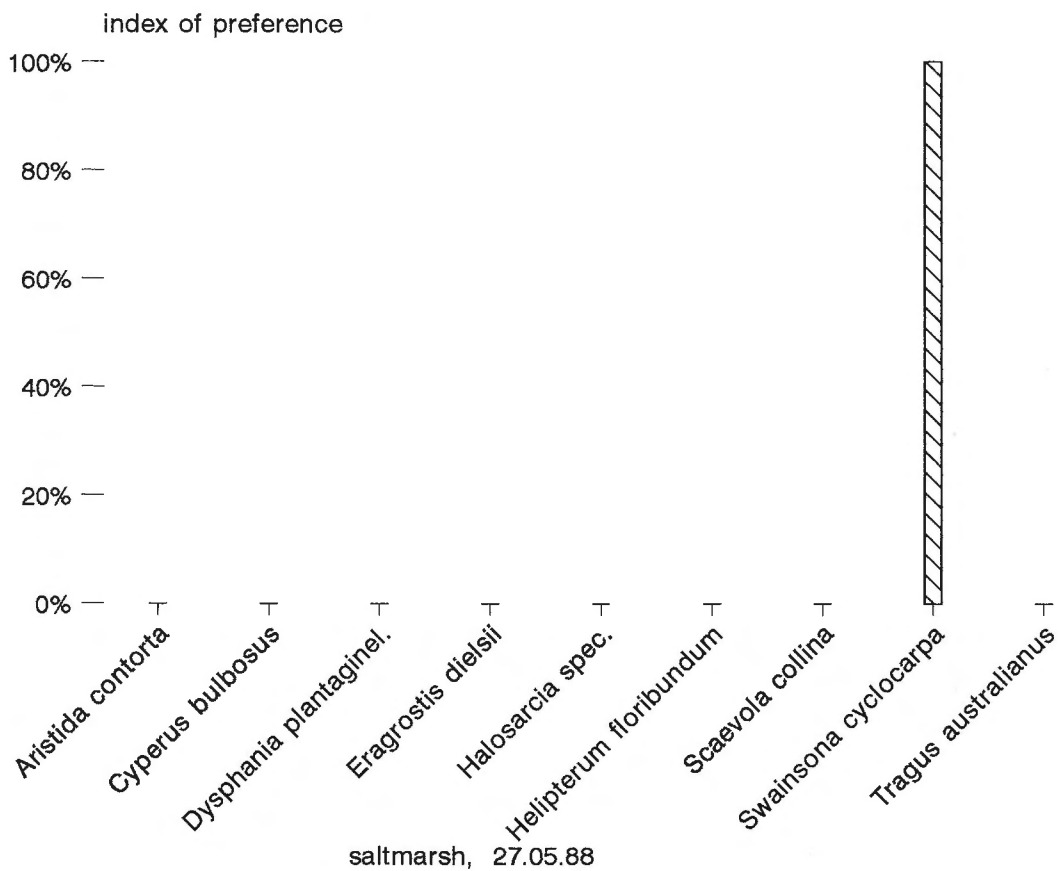
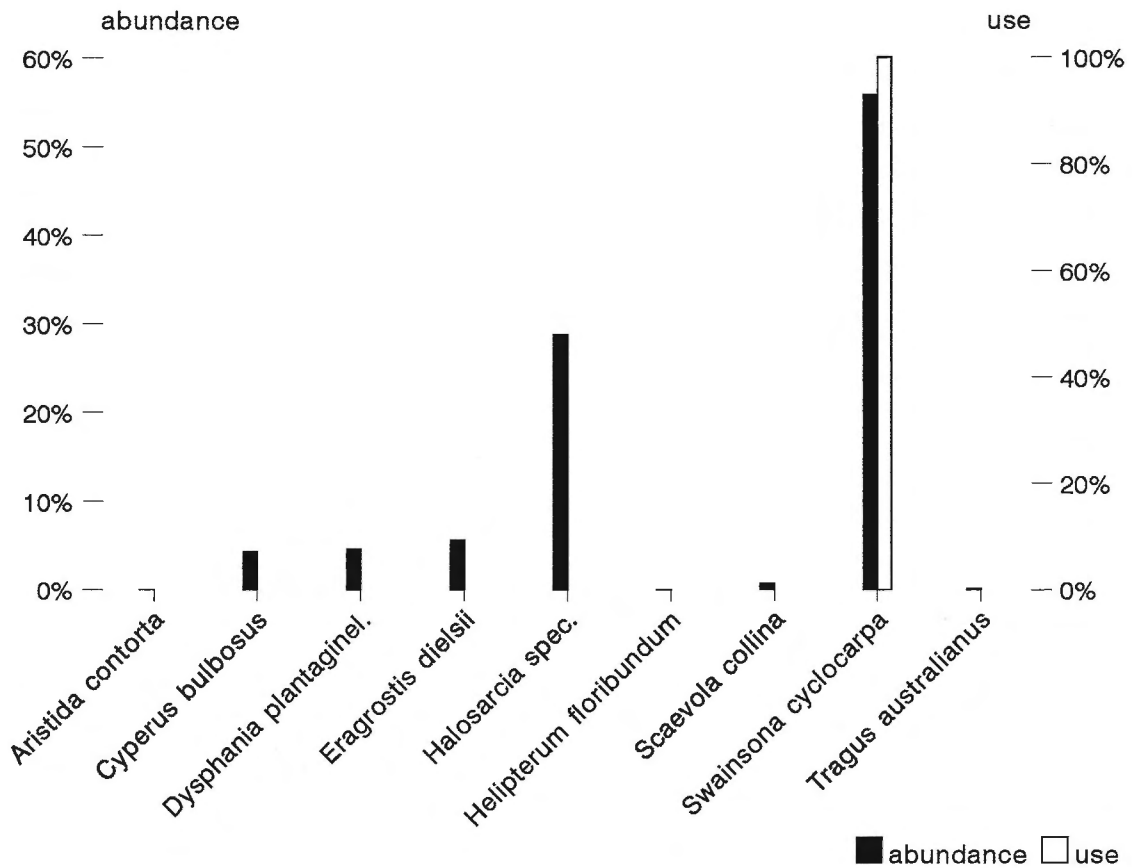


Fig. A9.18: Proportion rate of abundance and use - random sample



# Appendix

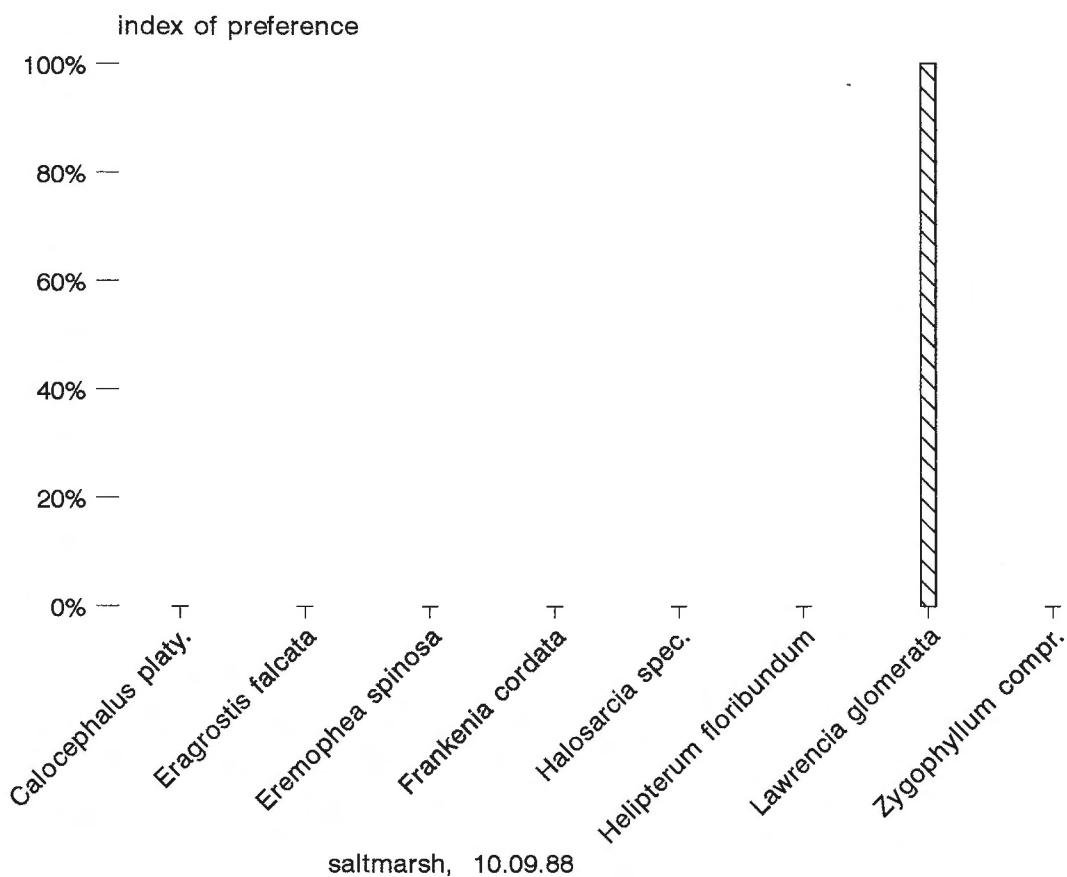
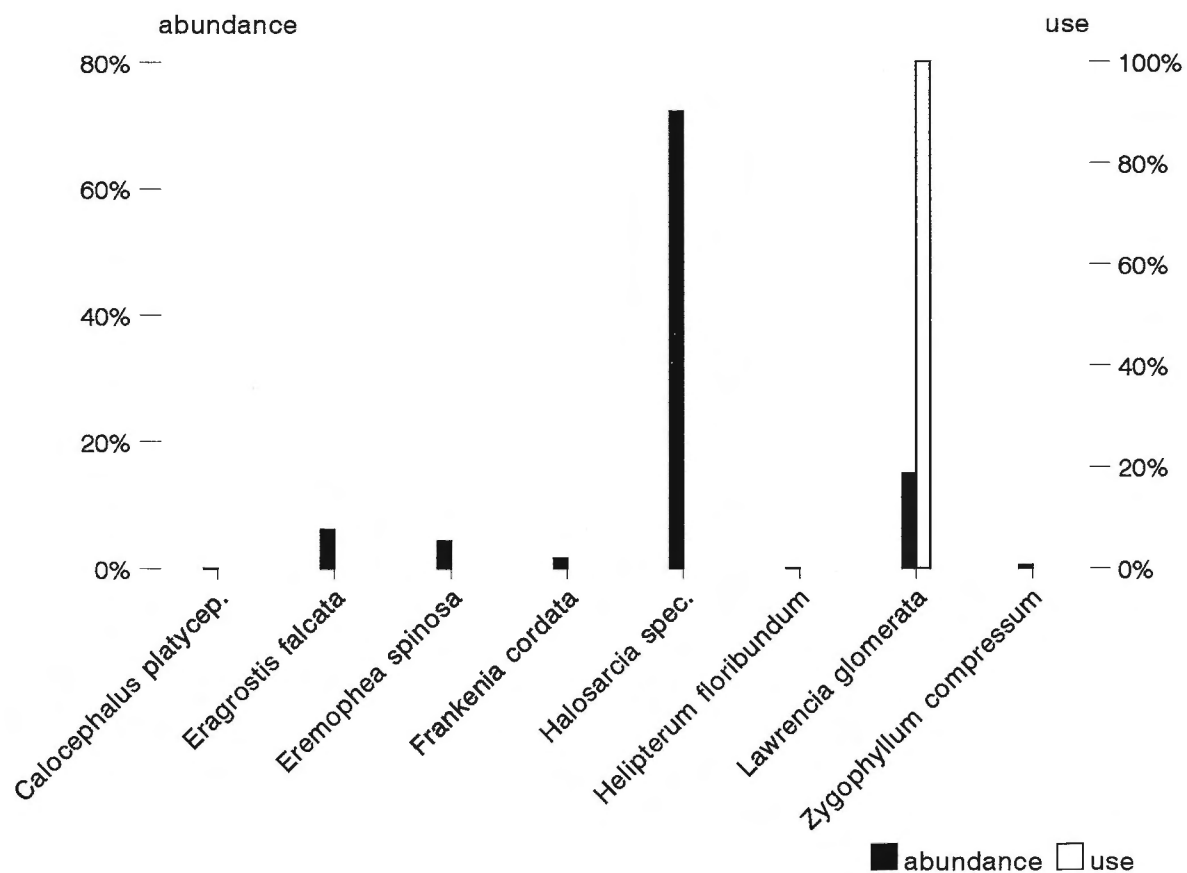


Fig. A9.19: Proportion rate of abundance and use - random sample

## Explanations to Chapter 6: Significance tests of the drinking frequencies

The calculated drinking frequencies were checked for statistical significance. The permissible error probability is usually at  $p = 0.05$  and is indicated in terms of figures by the significance threshold  $z_{crit}$  for the random samples to be compared. The respective calculated significance is indicated in the tables by  $z_{ber}$ , with  $z_{ber}$  being at least as big as  $z_{crit}$  in order to be significant on the level  $p < 0.05$  (\*). If the error probability is below  $p = 0.01$  the differences are called highly significant (\*\*). If  $z_{ber}$  does not reach the value of  $z_{crit}$  the observed differences are random, i.e. not significant, and are shown in Table AT3.2 with a (-).

The verification of the seasonal drinking frequencies is done with dependent random samples since the drinking frequencies of the **same** animals depending on the season are tested in comparison with each other. The random samples were subdivided into gender and age classes. In addition, adult females were distinguished whether they nursed a calf or not. The periods of time are marked by T1-T6. T1 describes the summer of 1986/1987, T2 the winter of 1987, ..., T6 the winter of 1989. The seasonal drinking frequencies were tested for statistical significance with the Wilcoxon-Test (DIEHL/KOHR 1987). All seasonal drinking frequencies are significant, the individual results are shown in Table AT3.1.

The verification of the gender specific and age dependent drinking frequencies is done with independent random samples, since the drinking frequencies of different animals within one class were tested. These were checked for statistical significance with the MANN-WHITNEY-U-Test (LORENZ 1988). Numbers were assigned to the individual classes (ref. Table AT3.2); 1:2 below T3 e.g. means the drinking frequencies of all adult males compared with the drinking frequencies of all adult females with calves in the season T3, that is in the summer of 1987/1988. The results of the significance tests are shown in Table AT3.2.

Table AT3.1: Results of the significance test of the seasonal drinking frequencies according to the WILCOXON-test with an error probability of  $p = 0.05$

Season	T1/T2	T2/T3	T3/T4	T4/T5	T5/T6
adult bulls					
$Z_{crit}$	0.0446	0.0591	0.0307	0.006	0.2845
$Z_{ber.}$	2.0083	1.8878	2.1574	2.5905	1.0703
adult cows with calf					
$Z_{crit}$	0.0446	0.0614	0.0446	0.0142	0.0108
$Z_{ber.}$	2.0083	1.8708	2.0083	2.451	2.5482
adult cows without calf					
$Z_{crit}$	0.0064	0.4185	0.0032	0.0064	0.0059
$Z_{ber.}$	2.7248	0.8090	2.8540	2.2748	2.7521
subadult bulls					
$Z_{crit}$	0.0211	0.0092	0.0029	0.0009	0.0119
$Z_{ber.}$	2.3062	2.6063	2.9785	3.3272	2.5159
subadult cows					
$Z_{crit}$	0.0736	0.0736	-	-	-
$Z_{ber.}$	1.7889	1.7889			

T1 = summer season 1986/87

T2 = winter season 1987

T2 = summer season 1987/88

T4 = winter season 1988

T3 = summer season 1988/89

T6 = winter season 1989

All calculated Z-values are greater than the critical values for Z; according to that, the seasonal drinking frequencies are significant. The sizes of the random samples for the subadult females for the period from winter 1987 to summer 1988/89 are not sufficiently big enough and can therefore not be compared with the values from the winter season 1989.

Table AT3.2: Significance test of the gender- and age-dependent drinking frequencies according to the MANN-WHITNEY-U-Test

Season	T1	S	T2	S	T3	S	T4	S	T5	S	T6	S
1:2												
Zcrit	0.0073		0.0175		0.1516		0.0999		0.0098		0.5426	
Zber.	2.6825	**	2.3771	*	1.4341	*	1.6449	*	2.5833	**	0.6089	*
1:3												
Zcrit	0.7543		0.7981		0.9082		0.1615		0.1042		0.0688	
Zber.	0.3129	-	0.2558	-	0.1153	-	1.4000	*	1.6250	*	1.8197	*
1:4												
Zcrit	0.0410		0.2819		0.0243		0.4795		0.9764		0.0229	
Zber.	2.0441	*	1.0762	*	2.2526	*	0.7072	*	0.0296	-	2.2753	*
1:5												
Zcrit	0.1002		0.8451		0.5427		0.0777		0.0835		0.1644	
Zber.	1.6435	*	0.1954	-	0.6088	*	1.7640	*	1.7308	*	1.3905	*
2:3												
Zcrit	0.0014		0.0028		0.0690		0.2854		0.1505		0.0111	
Zber.	3.2037	**	2.9942	**	1.8184	*	1.0683	*	1.4379	*	2.5391	*
2:4												
Zcrit	0.7631		0.0065		0.2751		0.0282		0.0019		0.0003	
Zber.	0.3014	-	2.7228	**	1.0915	*	2.1946	*	3.1015	**	3.5894	**
2:5												
Zcrit	0.8611		0.2733		0.2367		0.6171		1		0.0691	
Zber.	0.1750	-	1.0955	*	1.1832	*	0.5000	-	0	-	1.8176	*
3:4												
Zcrit	0.0646		0.1018		0.0046		0.0112		0.0388		0.8590	
Zber.	1.8483	*	1.6361	*	2.8334	**	2.5358	*	2.0658	*	0.1776	-
3:5												
Zcrit	0.0413		0.5419		0.4805		0.1595		0.3987		0.8146	
Zber.	2.0409	*	0.6099	*	0.7055	*	1.4067	*	0.8440	*	0.2345	-
4:5												
Zcrit	1		0.7225		0.2925		0.0283		0.0307		0.5038	
Zber.	0	-	0.3552	-	1.0527	*	2.1935	*	2.1610	*	0.6685	*

1 = adult bulls

2 = adult cows with calf

3 = adult cows without calf

4 = subadult bulls

5 = subadult cows

\* significant ( $\alpha < 0.05$ )

\*\* highly significant ( $\alpha < 0.01$ )

- not significant

Appendix

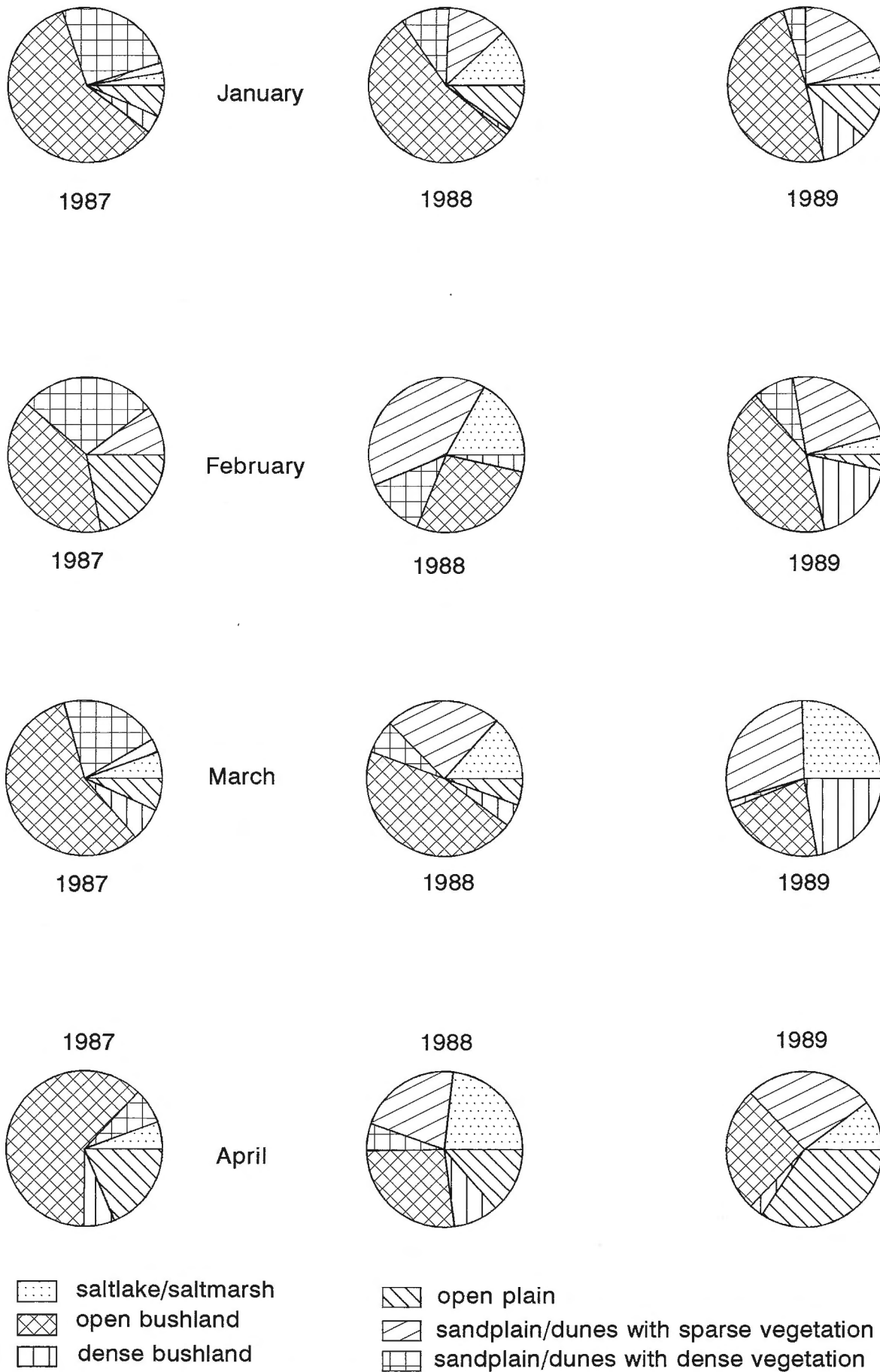


Fig. A10.1: habitat use per month

Appendix

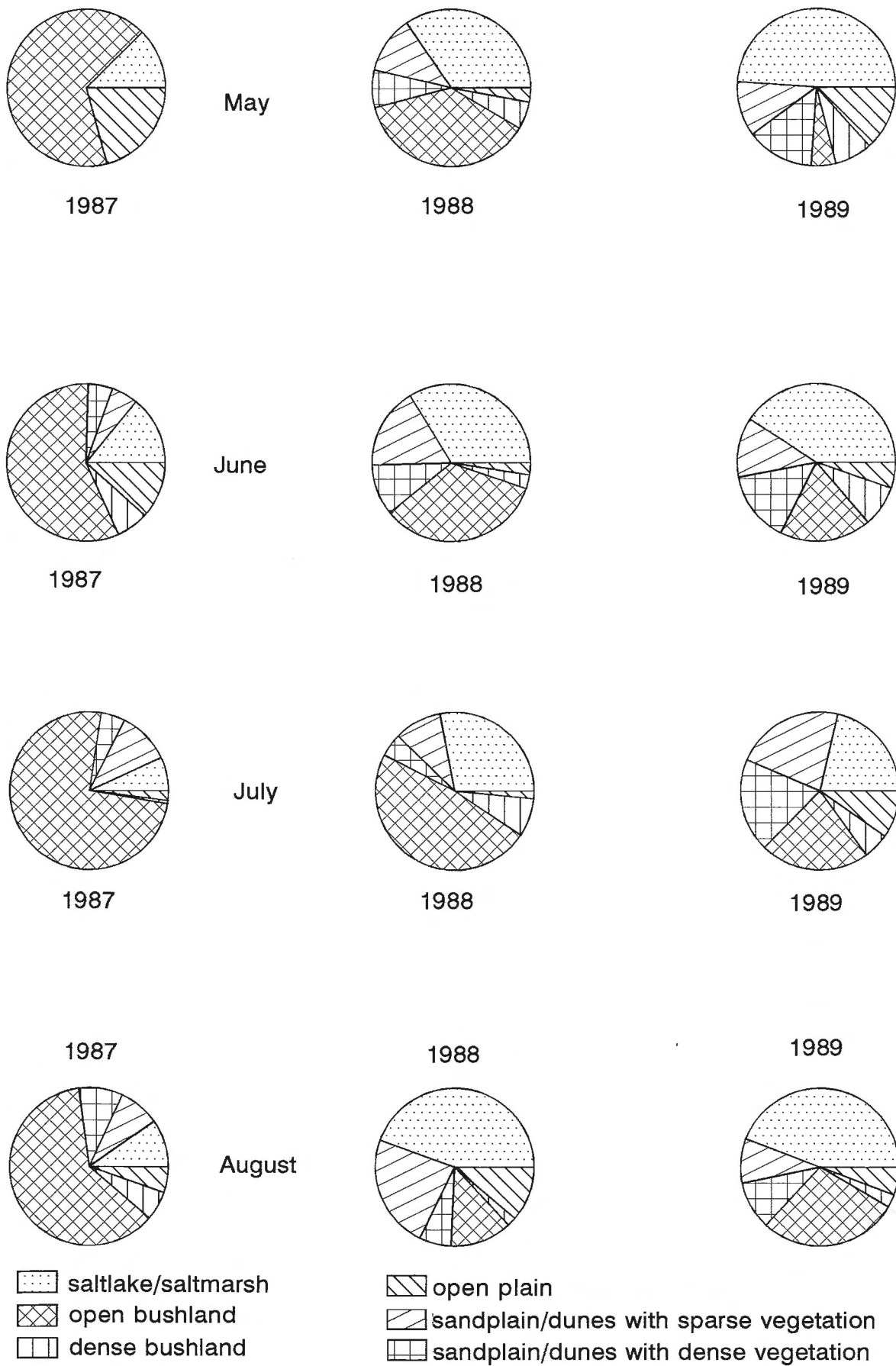


Fig. A10.2: habitat use per month

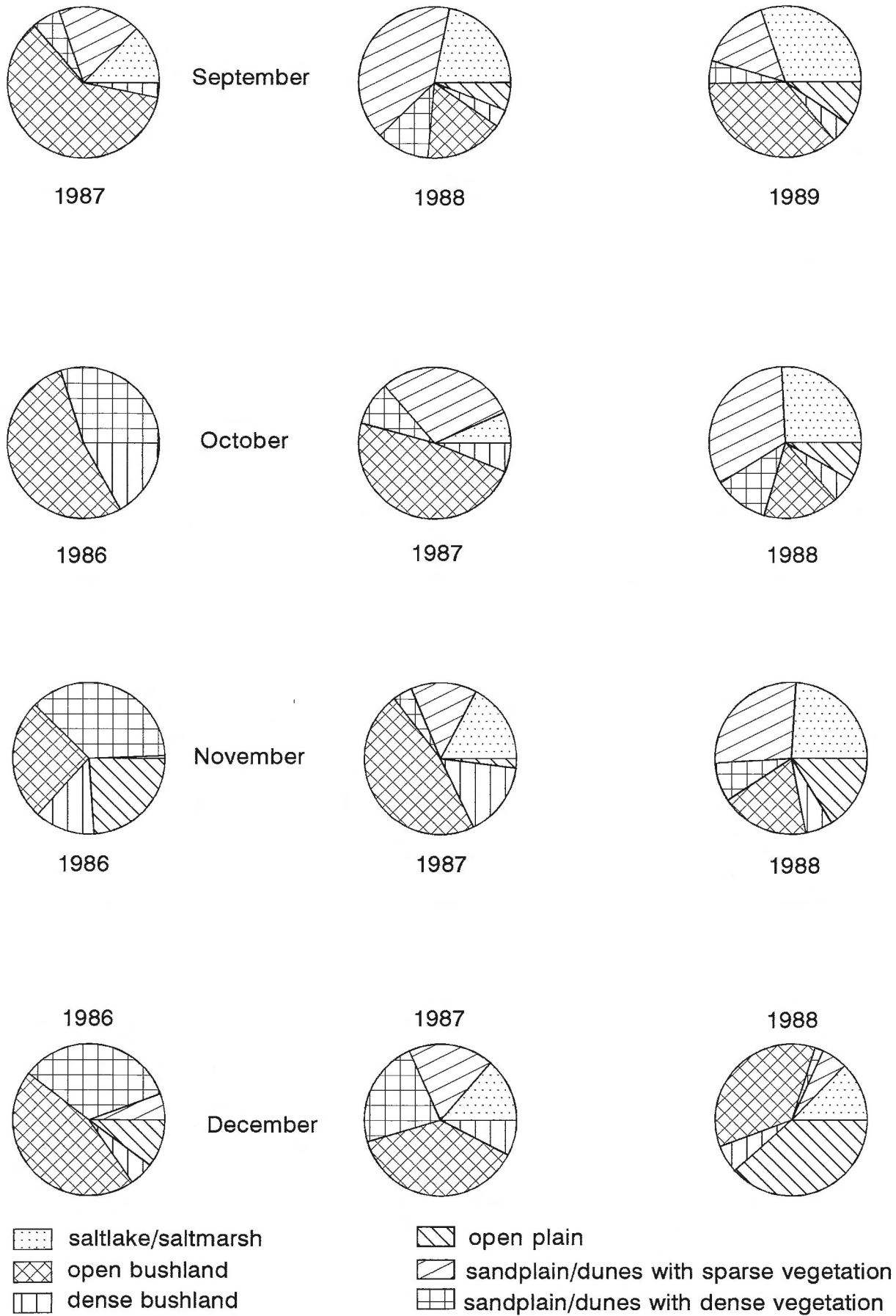


Fig. A10.3: habitat use per month

## Appendix

Explanations to the calculated indices for the vegetation analyses (tables AT4.1-4)

R/N0 = number of species

### Richness Indices

R/R1 = Margalef Index (MARGALEF 1958)

$$R1 = \frac{S - 1}{\ln(n)}$$

R/R2 = Menhinick Index (MENHINICK 1964)

$$R2 = \frac{S}{\sqrt{n}}$$

### Indices for diversity

D/L = Simpson's Index (SIMPSON 1949)

$$\lambda = \sum_{i=1}^S p_i^2$$

D/H' = Shannon Index (SHANNON & WEAVER 1949)

$$H' = -\sum_{i=1}^{s^*} (p_i \ln p_i)$$

D/N1 = Hill's Numbers (HILL 1973)

$$N1 = e^{H'}$$

D/N2 = Hill's Numbers (HILL 1973)

$$N2 = 1/\lambda$$



Eveness Indices:

E1 = Eveness Index by Pielou (PIELOU 1975)

$$E1 = \frac{H'}{\ln(S)} = \frac{\ln(N1)}{\ln(N0)}$$

E2 = Eveness Index by Sheldon (SHELDON 1969)

$$E2 = \frac{e^{H'}}{S} = \frac{N1}{N0}$$

E3 = Eveness Index by Heip (HEIP 1974)

$$E3 = \frac{e^{H'}-1}{S-1} = \frac{N1-1}{N0-1}$$

E4 = Eveness Index by Hill (HILL 1973)

$$E4 = \frac{(1/\lambda)-1}{e^{H'}-1} = \frac{N2-1}{N1-1}$$

E5 = Eveness Index by Alatalo (ALATALO 1981)

$$E5 = \frac{(1/\lambda)-1}{e^{H'}-1} = \frac{N2-2}{N1-1}$$

Tab. AT4.1: Indices of the habitat specific seasonal vegetation

habitat	R/N0	R/R1	R/R2	D/L	D/H'	D/N1	D/N2	E/E1	E/E2	E/E3	E/E4	E/E5
open bushland summer	68	6,47	0,38	0,05	3,40	29,9	21,5	0,81	0,44	0,43	0,72	0,71
open bushland winter	53	5,34	0,47	0,06	3,13	22,9	16,0	0,79	0,43	0,42	0,70	0,69
dense bushland summer	44	4,78	0,49	0,07	3,07	21,5	15,4	0,81	0,49	0,48	0,71	0,70
dense bushland winter	53	5,66	0,53	0,06	3,21	24,8	16,5	0,81	0,47	0,46	0,66	0,65
open plain summer	39	3,89	0,30	0,16	2,48	11,9	6,4	0,68	0,31	0,29	0,53	0,49
open plain winter	59	5,42	0,28	0,07	3,14	23,1	15,2	0,77	0,39	0,38	0,66	0,64
open sandplain/dunes summer	97	9,91	0,76	0,11	3,25	25,8	8,8	0,71	0,27	0,26	0,34	0,31
open sandplain/dunes winter	80	8,34	0,70	0,12	3,12	22,6	8,4	0,71	0,28	0,27	0,37	0,34
sandplain/dunes dense veg. summer	82	8,34	0,64	0,06	3,32	27,7	15,7	0,75	0,34	0,33	0,57	0,55
sandplain/dunes dense veg. winter	57	6,24	0,64	0,10	2,93	18,6	9,6	0,72	0,33	0,32	0,52	0,49
saltmarsh summer	14	1,51	0,19	0,18	2,02	7,5	5,6	0,76	0,54	0,50	0,75	0,71
saltmarsh winter	19	1,91	0,17	0,15	2,15	8,6	6,7	0,73	0,45	0,42	0,78	0,75

Tab. AT4.2: Indices of ground vegetation analyses from permanent transects

Fig.	R/N0	R/R1	R/R2	D/L	D/H'	D/N1	D/N2	E/E1	E/E2	E/E3	E/E4	E/E5
A5. 1a	22	3,45	1,05	0,12	2,38	10,8	8,5	0,77	0,49	0,47	0,79	0,77
A5. 1b	27	4,10	1,13	0,08	2,82	16,8	13,2	0,86	0,62	0,61	0,79	0,78
A5. 1c	21	3,32	1,03	0,13	2,32	10,2	7,7	0,76	0,48	0,46	0,76	0,73
A5. 2a	17	2,74	0,91	0,19	2,02	7,5	5,3	0,71	0,44	0,41	0,71	0,66
A5. 2b	21	3,41	1,12	0,16	2,25	9,5	6,2	0,74	0,45	0,42	0,66	0,62
A5. 2c	21	3,82	1,54	0,12	2,47	11,8	8,4	0,81	0,56	0,54	0,71	0,68
A5. 3a	10	1,67	0,67	0,37	1,38	4,0	2,7	0,60	0,40	0,33	0,68	0,57
A5. 3b	12	1,88	0,65	0,31	1,61	5,0	3,3	0,65	0,42	0,36	0,65	0,56
A5. 3c	8	1,36	0,61	0,34	1,33	3,8	2,9	0,64	0,47	0,40	0,77	0,69
A5. 4a	20	3,02	0,86	0,17	2,19	8,9	5,8	0,73	0,44	0,42	0,65	0,60
A5. 4b	29	4,43	1,23	0,09	2,77	16,0	10,9	0,82	0,55	0,54	0,68	0,66
A5. 4c	23	3,62	1,10	0,12	2,46	11,7	8,2	0,78	0,51	0,49	0,70	0,67
A5. 5a	11	1,73	0,61	0,24	1,66	5,3	4,1	0,69	0,48	0,43	0,78	0,73
A5. 5b	16	2,60	0,90	0,21	2,00	7,4	4,8	0,72	0,46	0,43	0,65	0,60
A5. 5c	11	1,85	0,74	0,20	1,89	6,6	5,0	0,79	0,60	0,56	0,75	0,70
A5. 6a	14	2,35	0,88	0,19	1,94	7,0	5,3	0,74	0,50	0,46	0,75	0,71
A5. 6b	19	3,19	1,13	0,11	2,47	11,9	9,1	0,84	0,62	0,60	0,77	0,65
A5. 6c	16	2,69	0,98	0,13	2,30	10,0	7,5	0,83	0,62	0,60	0,75	0,72
A5. 7a	13	2,33	0,99	0,54	1,17	3,2	1,8	0,46	0,25	0,18	0,57	0,38
A5. 7b	10	1,70	0,71	0,75	0,67	2,0	1,3	0,29	0,20	0,11	0,68	0,35
A5. 7c	12	2,11	0,89	0,73	0,72	2,0	1,4	0,29	0,17	0,09	0,67	0,36
A5. 8a	9	1,75	0,92	0,24	1,61	5,0	4,1	0,73	0,55	0,50	0,82	0,77
A5. 8b	8	1,64	0,94	0,26	1,59	5,0	3,8	0,76	0,61	0,56	0,78	0,72
A5. 8c	6	1,23	0,78	0,36	1,23	3,4	2,8	0,68	0,57	0,48	0,81	0,74
A5. 9a	14	2,74	1,31	0,31	1,75	5,8	3,3	0,66	0,41	0,37	0,57	0,47
A5. 9b	13	2,85	1,59	0,10	2,29	9,9	9,6	0,89	0,76	0,74	0,97	0,96
A5. 9c	15	3,26	1,76	0,12	2,28	9,8	8,3	0,84	0,65	0,63	0,84	0,82
A5.10a	10	1,83	0,86	0,26	1,58	4,9	3,9	0,69	0,49	0,43	0,80	0,74
A5.10b	9	1,76	0,93	0,23	1,62	5,1	4,3	0,74	0,56	0,51	0,85	0,81
A5.10c	9	1,86	1,05	0,30	1,42	4,2	3,4	0,65	0,46	0,39	0,81	0,75
A5.11a	12	2,54	1,38	0,18	1,96	7,1	5,7	0,79	0,59	0,55	0,80	0,77
A5.11b	9	2,03	1,26	0,16	1,92	6,9	6,3	0,88	0,76	0,73	0,92	0,90
A5.11c	12	2,86	1,75	0,11	2,22	9,2	8,7	0,89	0,77	0,75	0,94	0,94
A5.12a	5	0,77	0,37	0,32	1,30	3,7	3,1	0,80	0,73	0,66	0,85	0,79
A5.12b	8	1,34	0,59	0,29	1,43	4,2	3,5	0,69	0,52	0,46	0,82	0,77
A5.12c	5	0,76	0,36	0,31	1,34	3,8	3,3	0,84	0,77	0,71	0,85	0,80

Tab. AT4.3: Indices of ground vegetation analyses from random samples

Fig.	R/NO	R/R1	R/R2	D/L	D/H'	D/H1	D/H2	E/E1	E/E2	E/E3	E/E4	E/E5
A6. 1	11	2,06	0,97	0,20	1,87	6,5	5,0	0,78	0,59	0,55	0,77	0,73
A6. 2	9	1,52	0,65	0,28	1,53	4,6	3,5	0,70	0,51	0,45	0,76	0,70
A6. 3	12	1,91	0,67	0,44	1,26	3,5	2,3	0,51	0,30	0,23	0,64	0,49
A6. 4	14	2,43	0,96	0,14	2,13	8,4	6,9	0,81	0,60	0,57	0,82	0,80
A6. 5	24	3,82	1,19	0,10	2,57	13,0	9,7	0,81	0,54	0,52	0,74	0,72
A6. 6	16	2,68	0,97	0,14	2,30	10,0	7,1	0,83	0,62	0,60	0,71	0,68
A6. 7	12	2,04	0,81	0,13	2,16	8,6	7,5	0,87	0,72	0,69	0,87	0,85
A6. 8	20	3,18	1,01	0,10	2,55	12,9	10,3	0,85	0,64	0,62	0,80	0,78
A6. 9	20	3,26	1,09	0,11	2,49	12,0	9,5	0,83	0,60	0,58	0,79	0,77
A6.10	15	2,25	0,67	0,15	2,14	8,5	6,5	0,79	0,57	0,54	0,77	0,74
A6.11	15	2,44	0,85	0,18	2,01	7,4	5,4	0,74	0,50	0,46	0,73	0,69
A6.12	15	2,43	0,84	0,16	2,05	7,7	6,1	0,76	0,52	0,48	0,79	0,76
A6.13	15	2,02	0,47	0,36	1,58	4,9	2,8	0,58	0,32	0,28	0,57	0,45
A6.14	17	2,47	0,67	0,15	2,27	9,7	6,8	0,80	0,57	0,54	0,71	0,68
A6.15	11	1,65	0,53	0,42	1,33	3,8	2,4	0,56	0,34	0,28	0,63	0,50
A6.16	10	1,70	0,71	0,61	0,96	2,6	1,7	0,42	0,26	0,18	0,63	0,40
A6.17	13	2,99	1,75	0,13	2,17	8,7	7,7	0,85	0,67	0,64	0,88	0,86
A6.18	9	1,51	0,64	0,50	1,09	3,0	2,0	0,50	0,33	0,25	0,68	0,51
A6.19	9	1,72	0,87	0,31	1,51	4,5	3,3	0,69	0,50	0,44	0,72	0,64
A6.20	17	3,02	1,21	0,26	1,85	6,3	3,8	0,65	0,37	0,33	0,60	0,53
A6.21	20	3,04	0,88	0,16	2,20	9,0	6,3	0,73	0,45	0,42	0,70	0,66
A6.22	17	3,13	1,32	0,12	2,28	9,8	8,3	0,81	0,58	0,55	0,84	0,83
A6.23	16	2,64	0,93	0,20	1,98	7,2	5,0	0,71	0,45	0,41	0,69	0,65
A6.24	23	4,04	1,51	0,32	1,79	6,0	3,2	0,57	0,26	0,23	0,53	0,44
A6.25	7	1,02	0,37	0,43	1,08	2,0	2,3	0,56	0,42	0,32	0,79	0,68
A6.26	9	1,29	0,40	0,19	1,79	6,0	5,3	0,81	0,67	0,62	0,80	0,85
A6.27	8	1,25	0,49	0,22	1,68	5,4	4,5	0,81	0,67	0,62	0,83	0,79

Tab. AT4.4: Indices of vegetation analyses of trees &amp; shrubs

Fig.	R/NO	R/R1	R/R2	D/L	D/H'	D/H1	D/H2	E/E1	E/E2	E/E3	E/E4	E/E5
A7. 1	8	1,70	1,02	0,25	1,58	4,8	4,0	0,76	0,61	0,55	0,82	0,77
A7. 2	7	1,53	0,98	0,20	1,66	5,3	4,9	0,86	0,75	0,71	0,92	0,91
A7. 3	12	2,39	1,20	1,17	1,95	7,1	5,8	0,79	0,59	0,55	0,83	0,80
A7. 4	8	1,73	1,06	0,25	1,60	5,0	4,1	0,77	0,62	0,57	0,82	0,77
A7. 5	7	1,54	1,00	0,35	1,42	4,1	2,9	0,73	0,59	0,52	0,70	0,60
A7. 6	12	2,61	1,46	0,16	2,05	7,8	6,1	0,83	0,65	0,62	0,78	0,75
A7. 7	12	1,96	0,73	0,16	2,06	7,8	6,3	0,83	0,65	0,62	0,80	0,77
A7. 8	13	2,64	1,33	0,16	2,14	8,5	6,3	0,84	0,66	0,63	0,74	0,70
A7. 9	8	1,59	0,89	0,27	1,55	4,7	3,8	0,74	0,59	0,53	0,80	0,75
A7.10	2	1,44	1,41	0,00	0,69	2,0	0,0	1,00	1,00	1,00	1,00	1,00
A7.11	3	1,24	1,34	0,20	1,05	2,9	5,0	0,96	0,96	0,94	1,74	2,14
A7.12	3	0,87	0,95	0,22	0,64	1,9	1,6	0,58	0,63	0,45	0,85	0,68
A7.13	14	2,41	0,94	0,15	2,08	8,0	6,6	0,79	0,57	0,54	0,82	0,79
A7.14	14	3,99	2,75	0,06	2,46	11,7	15,5	0,93	0,84	0,82	1,32	1,35
A7.15	10	3,51	2,77	0,05	2,20	9,1	19,5	0,96	0,91	0,90	2,15	2,29
A7.16	12	2,31	1,11	0,19	1,98	7,3	5,4	0,80	0,61	0,57	0,74	0,69
A7.17	12	2,59	1,43	0,21	1,90	6,7	4,8	0,76	0,55	0,51	0,72	0,77
A7.18	15	3,68	2,24	0,18	2,12	8,4	5,5	0,78	0,56	0,53	0,66	0,61
A7.19	9	1,65	0,79	0,35	1,35	3,9	2,9	0,62	0,43	0,36	0,74	0,65
A7.20	11	1,69	0,57	0,78	0,61	1,8	1,3	0,25	0,17	0,08	0,70	0,34
A7.21	1	0,00	0,08	1,00	0,00	1,0	1,0	1,00	1,00	1,00	1,00	1,00
A7.22	12	2,55	1,39	0,16	1,99	7,3	6,3	0,80	0,61	0,57	0,86	0,83
A7.23	13	2,27	0,93	0,28	1,60	5,0	3,6	0,62	0,38	0,33	0,72	0,65
A7.24	15	2,82	1,25	0,43	1,42	4,1	2,4	0,52	0,27	0,22	0,57	0,43
A7.25	13	2,30	0,95	0,29	1,60	5,0	3,4	0,62	0,38	0,33	0,69	0,62

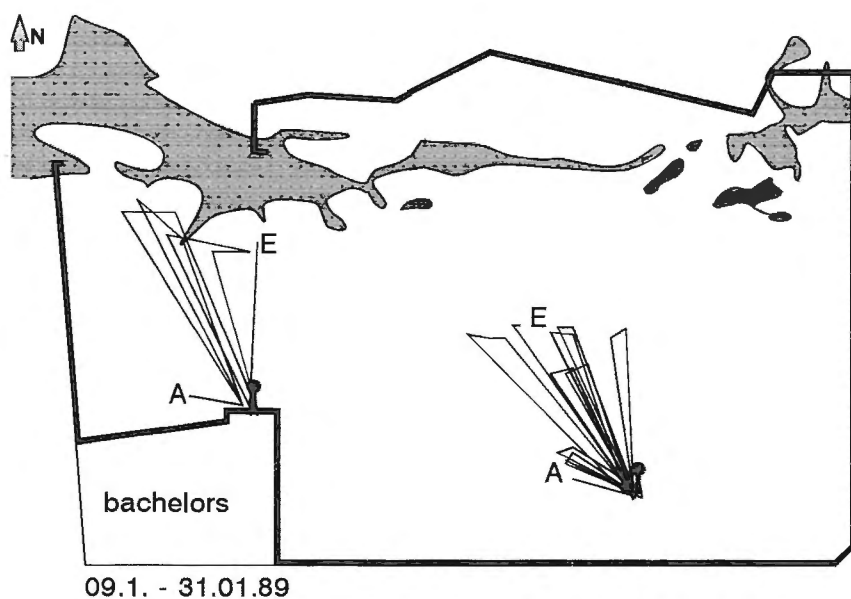
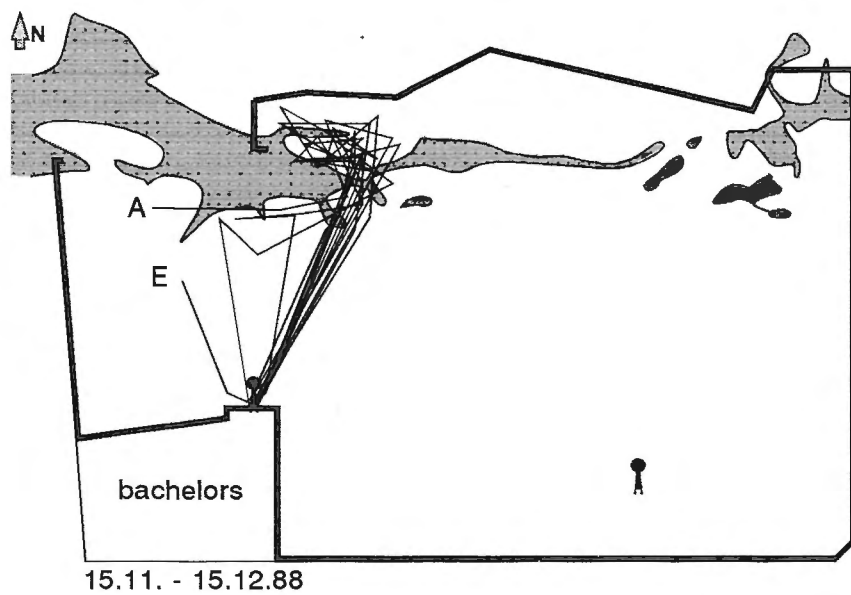
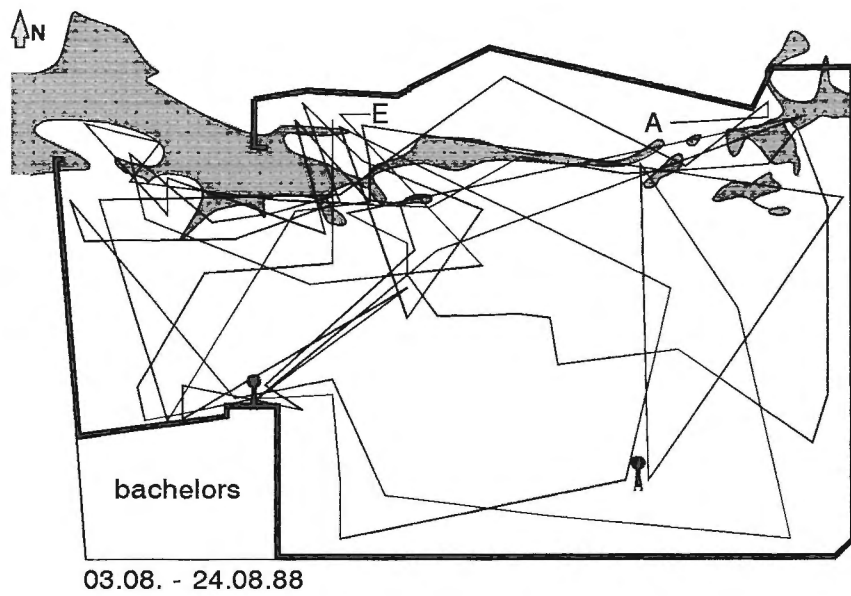


Fig. A11.1-3: range utilization patterns; A = first day, E = last day

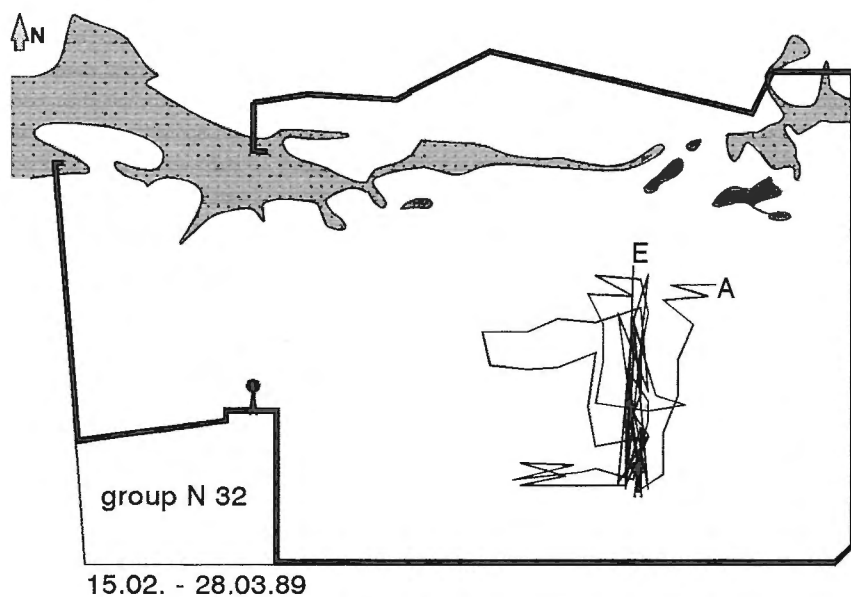
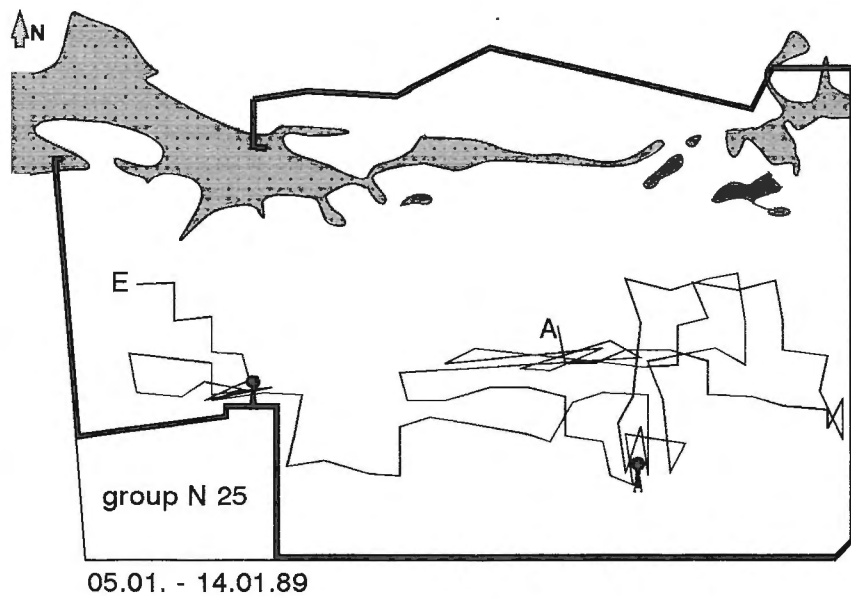
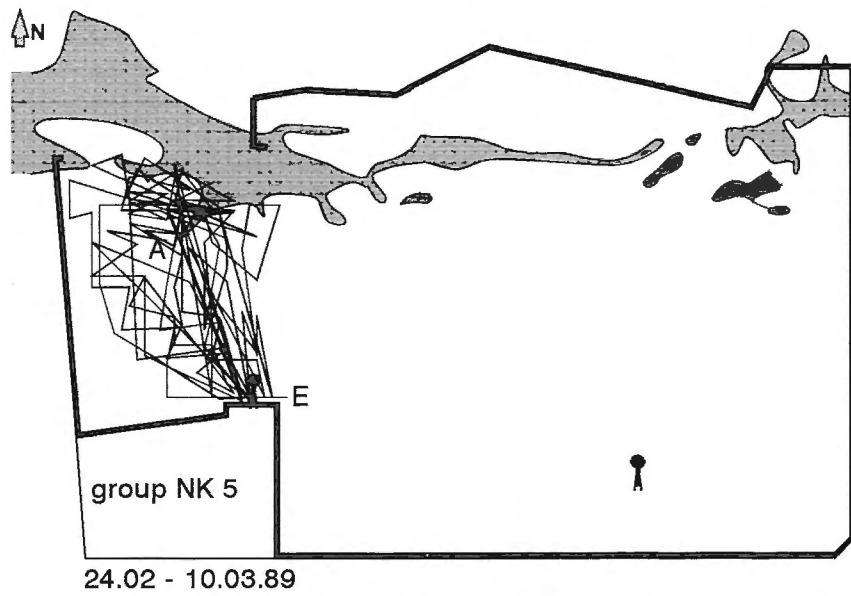


Fig. A11.4-6: range utilization patterns

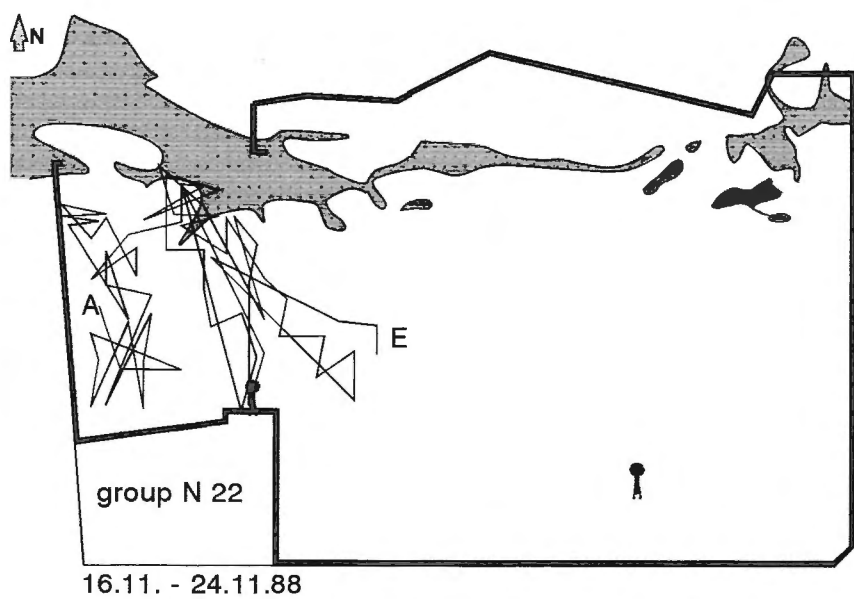
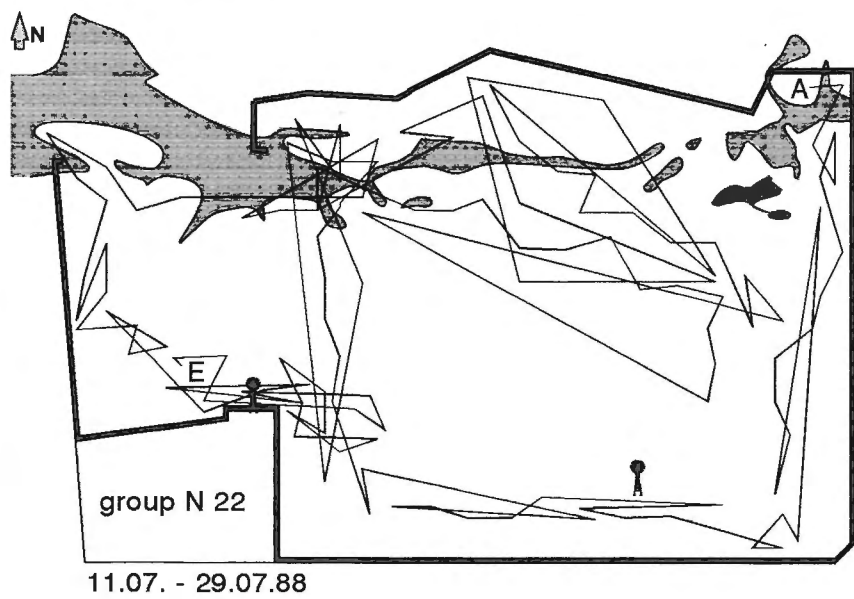
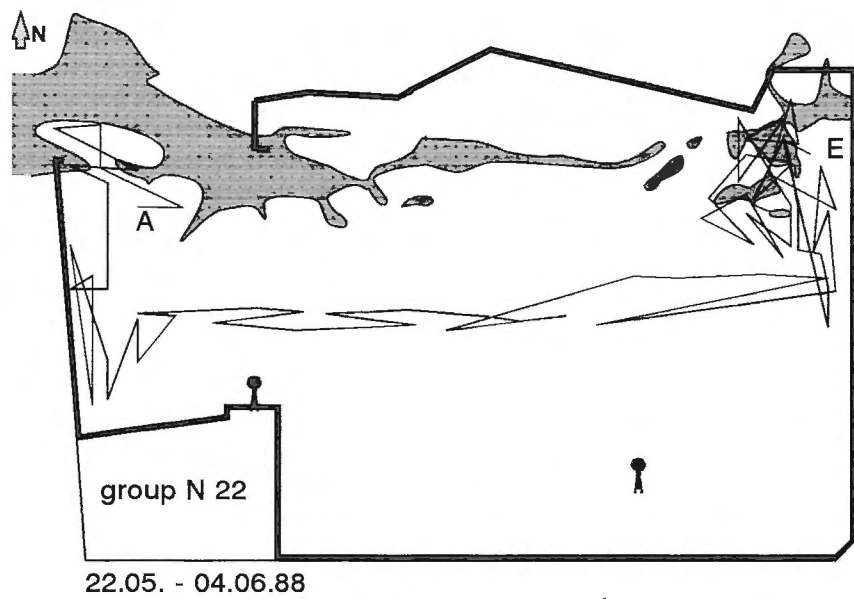


Fig. A11.7-9: range utilization patterns



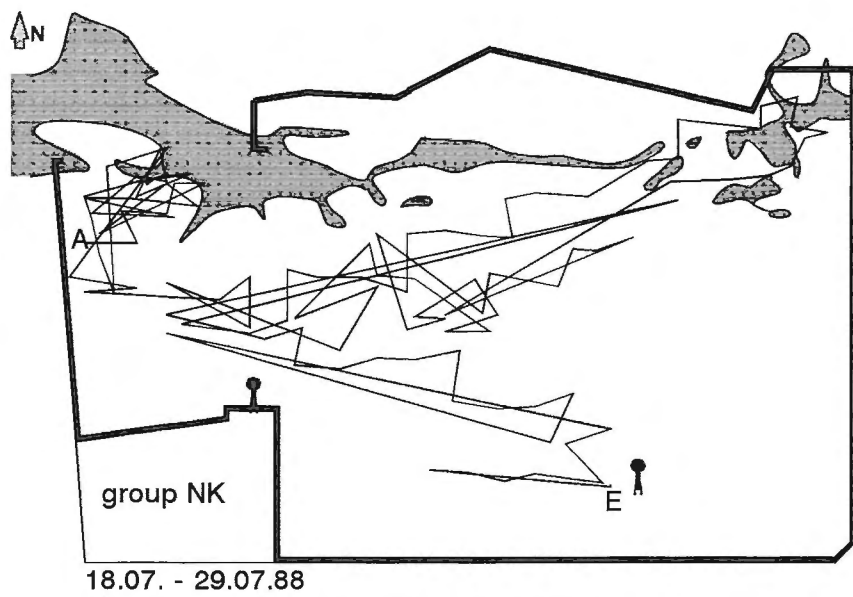
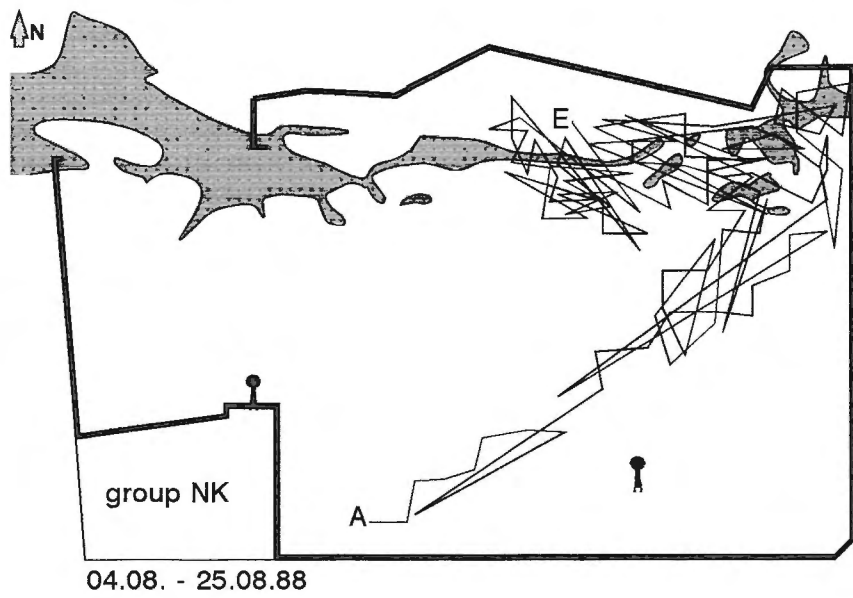
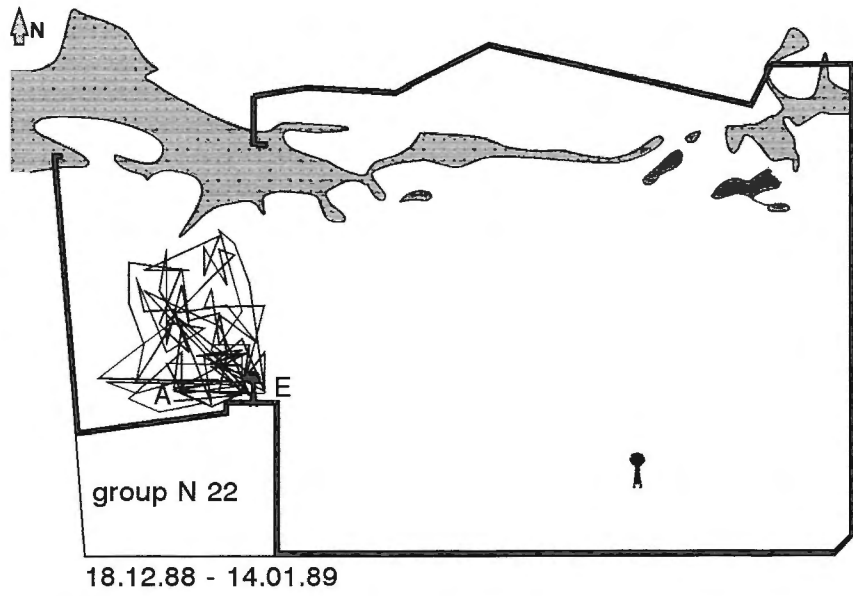
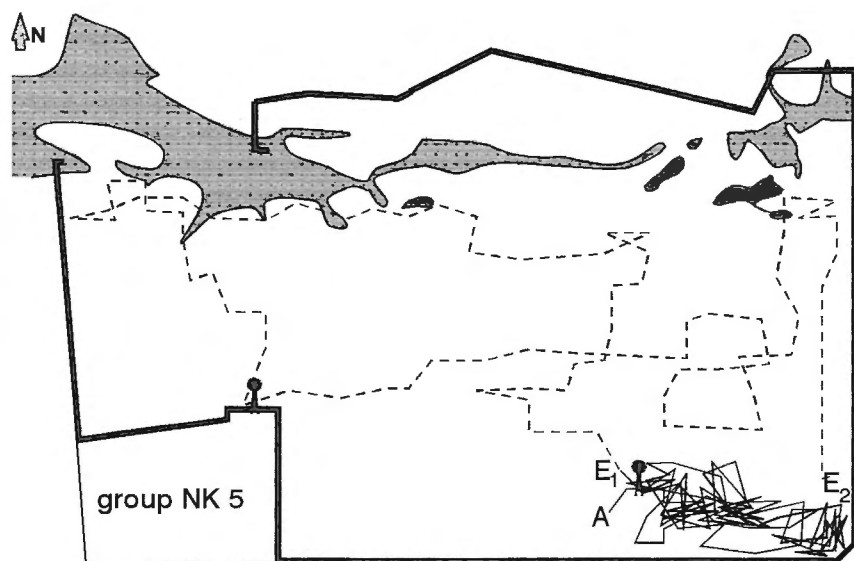
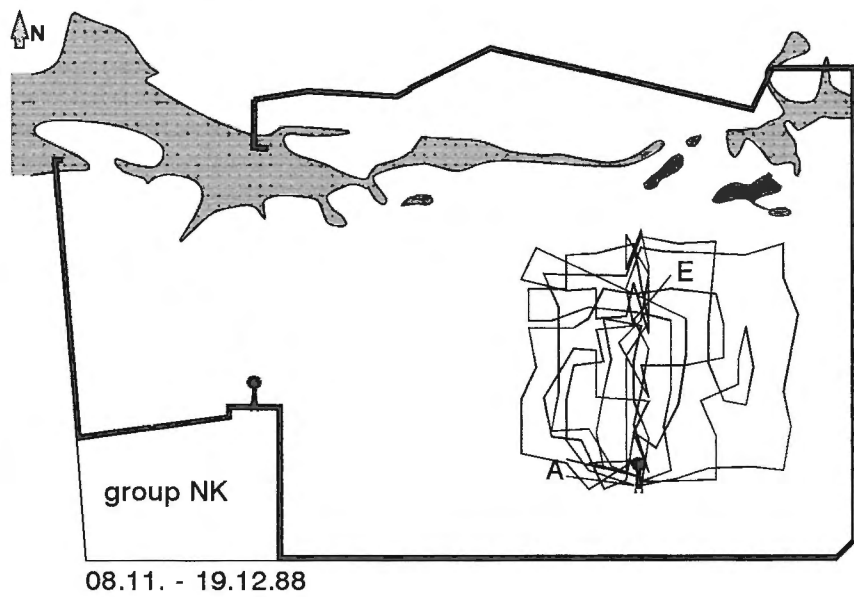
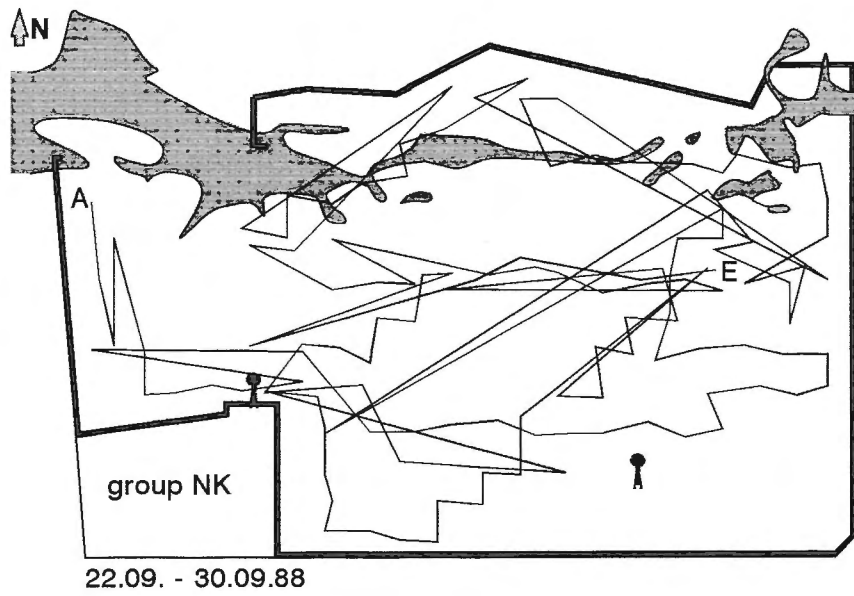


Fig. A11.10-12: range utilization patterns



— A-E<sub>1</sub> v. 12.06.-17.07.89 not disturbed  
 --- E<sub>1</sub>-E<sub>2</sub> v. 17.07.-24.07.89 disturbed by bachelors  
 Fig. A11.13-15: range utilization patterns

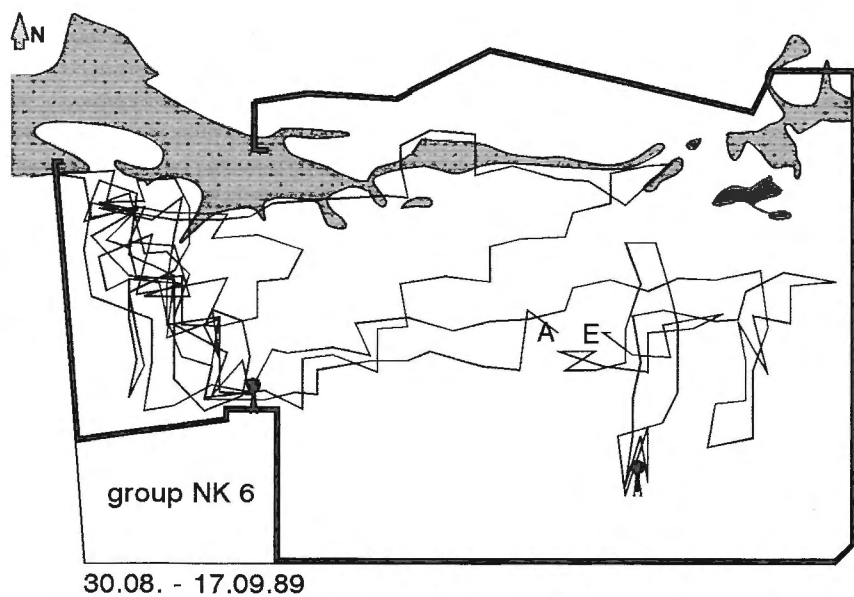
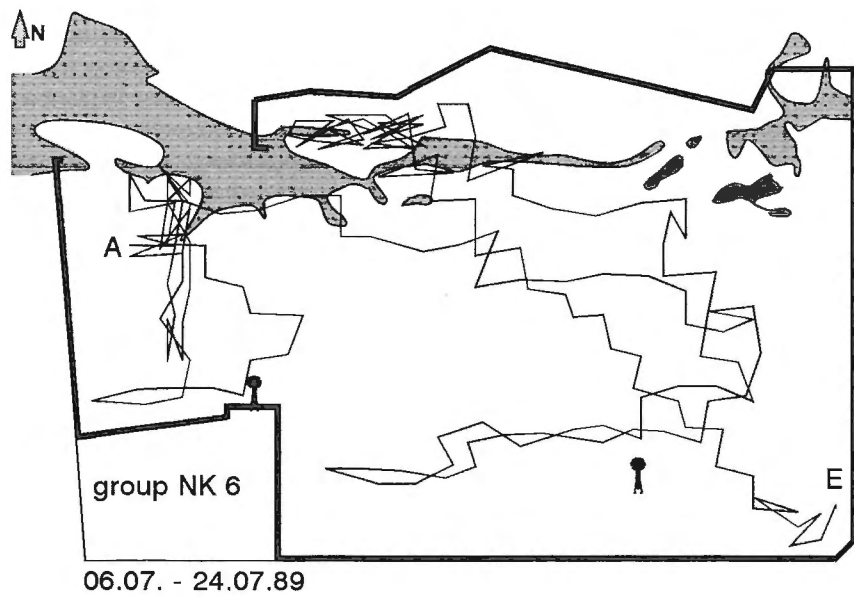
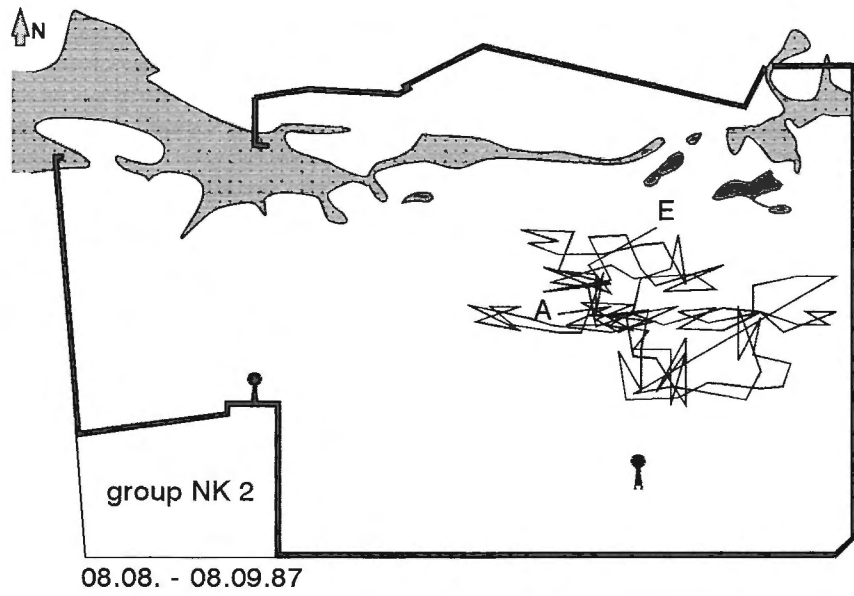


Fig. A11.16-18: range utilization patterns

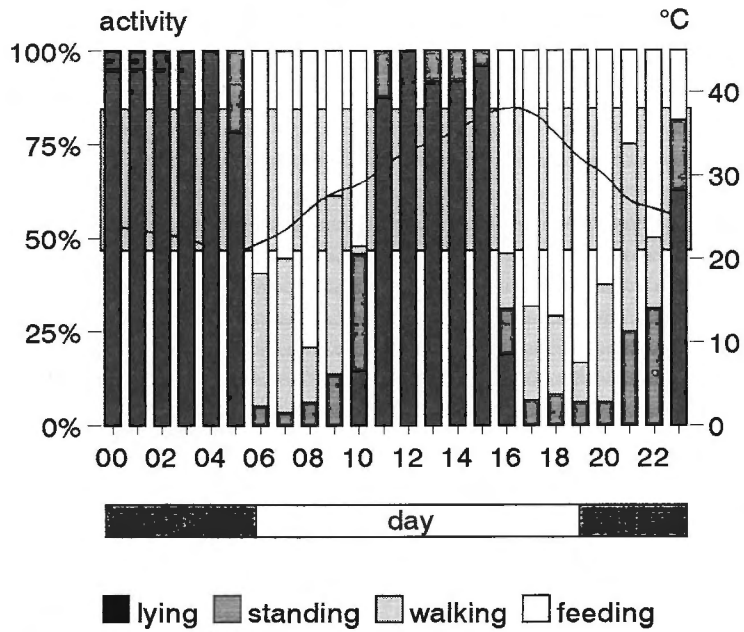


Fig. A12.1: example January (January 1989; n = 1856)

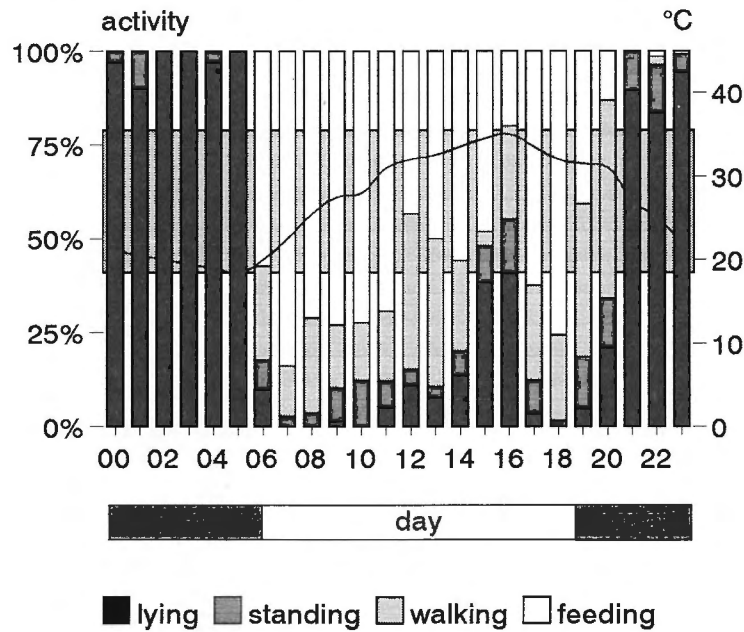


Fig. A12.2: example February (February 1987, n = 3381)

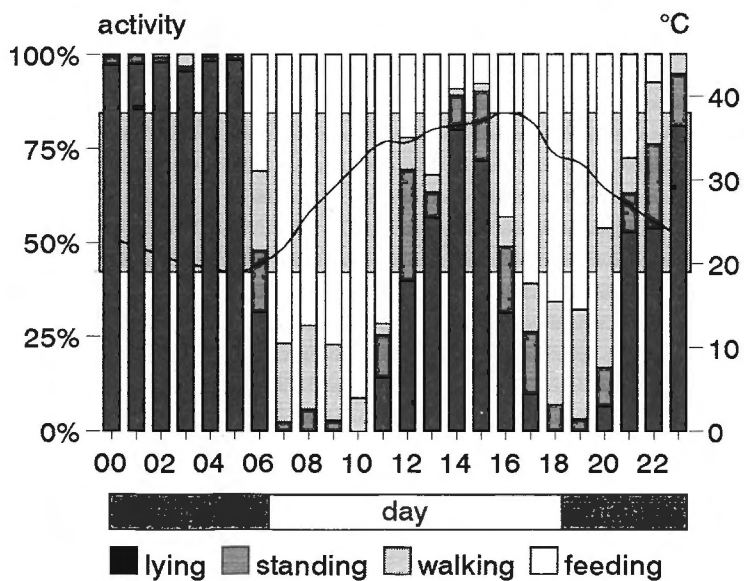


Fig. A12.3: example March (March 1987, n = 7046)

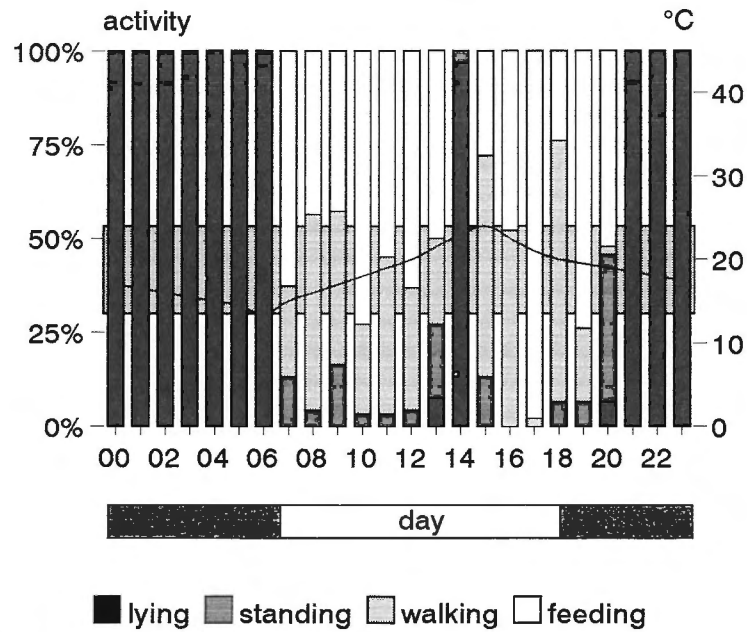


Fig. A12.4: example April (April 1989, n = 1315)

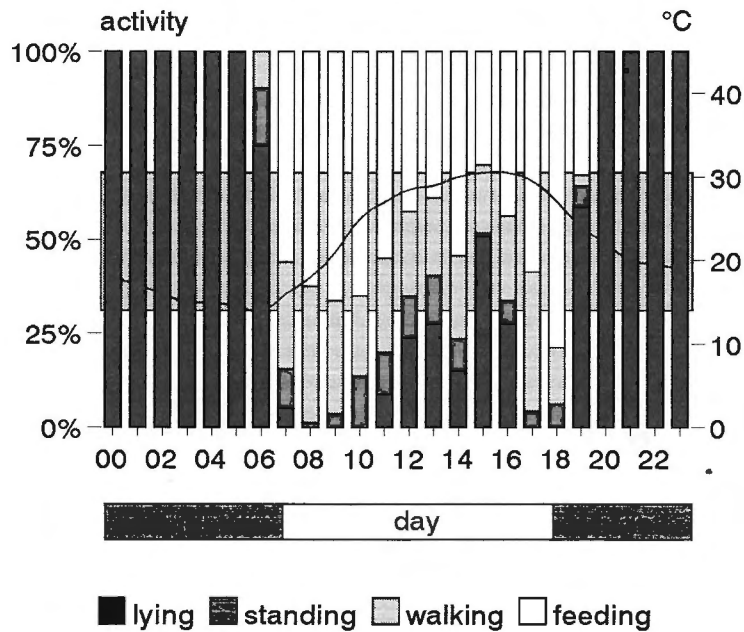


Fig. A12.5: example May (May 1988, n = 1522)

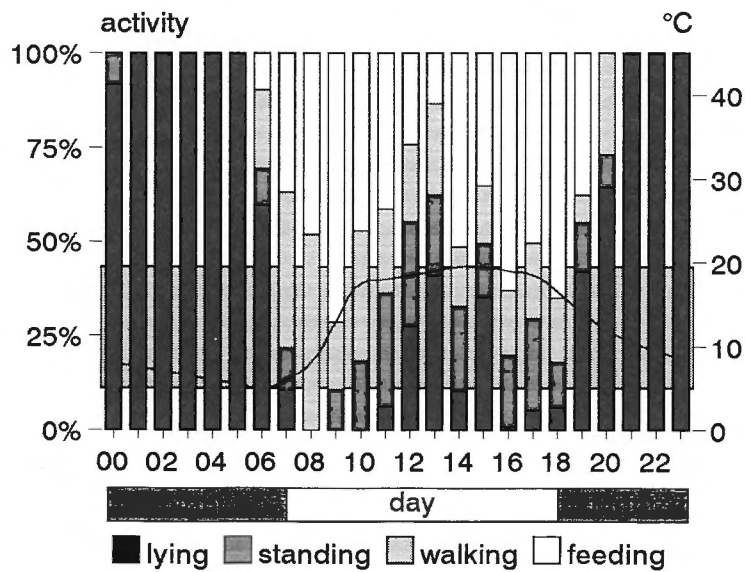


Fig. A12.6: example June (June 1988, n = 2187)

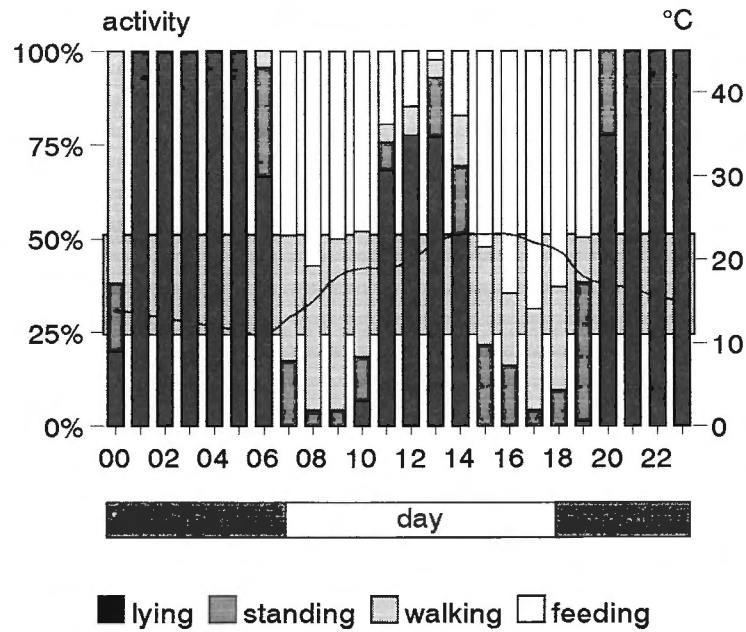


Fig. A12.7: example July (July 1988, n = 2714)

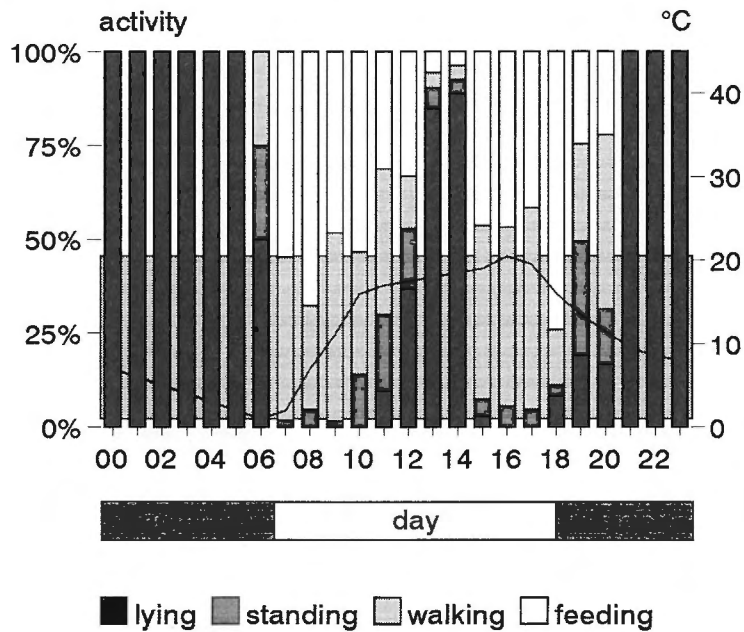


Fig. A12.8: example August (August 1988, n = 1855)

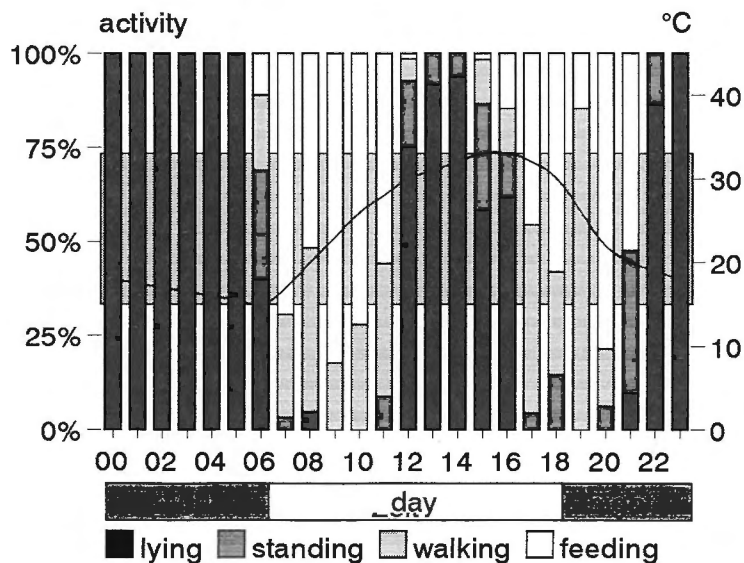


Fig. A12.9: example September (September 1988, n = 1260)

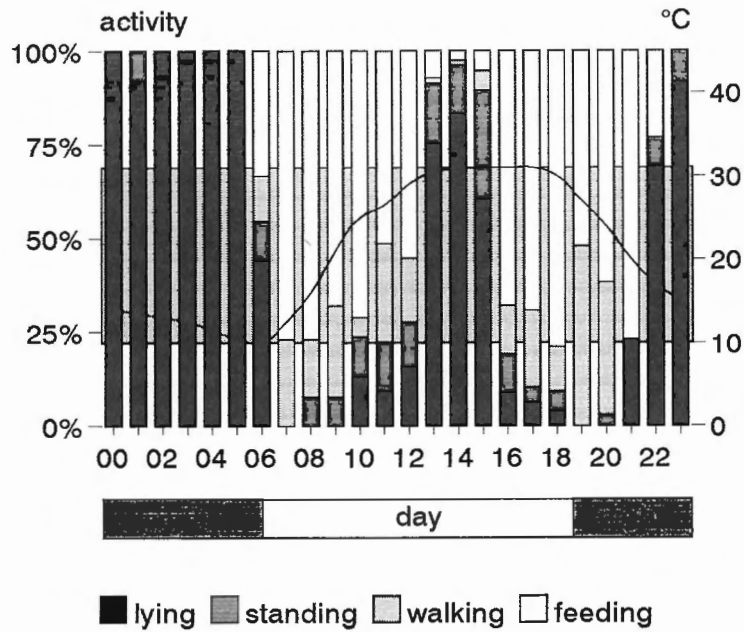


Fig. A12.10: example October (October 1987, n = 1114)

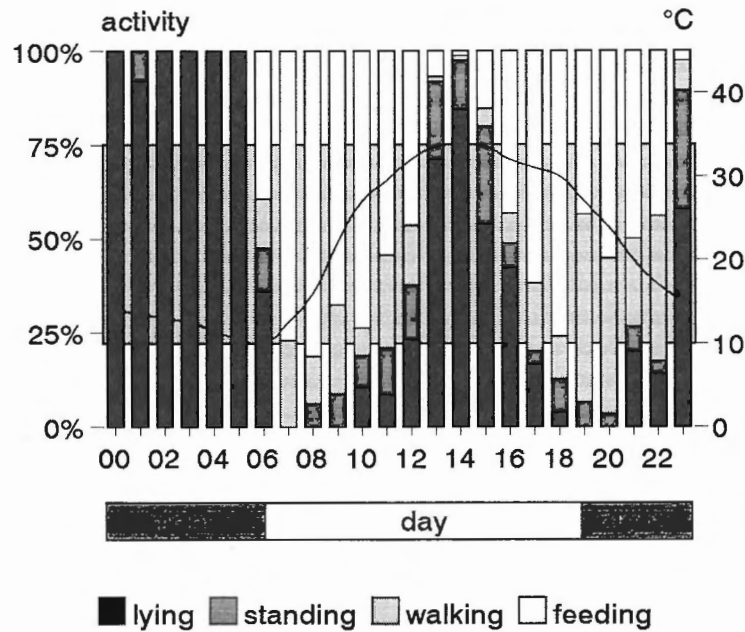


Fig. A12.11: example November (November 1988, n = 1271)

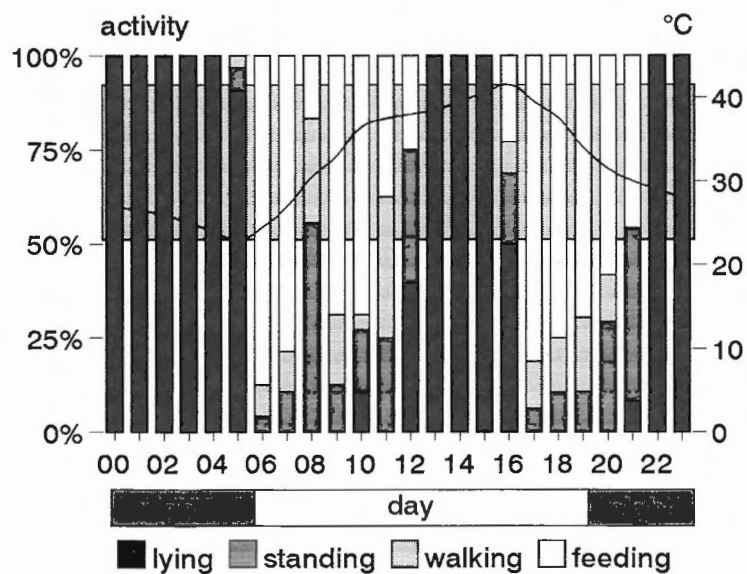


Fig. A12.12: example December (December 1988, n = 898)

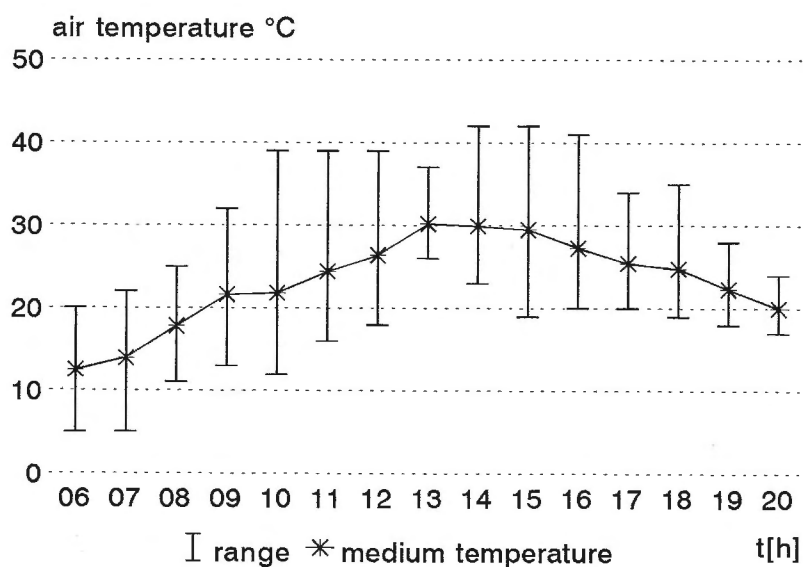
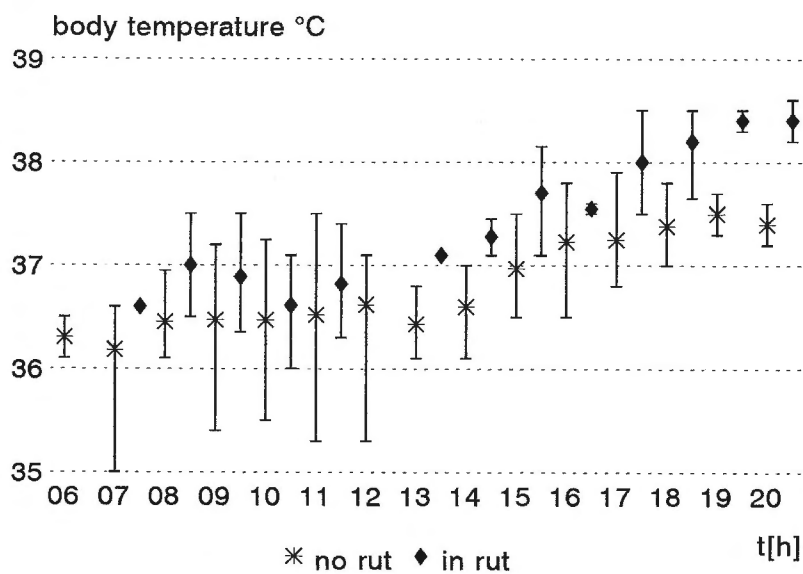
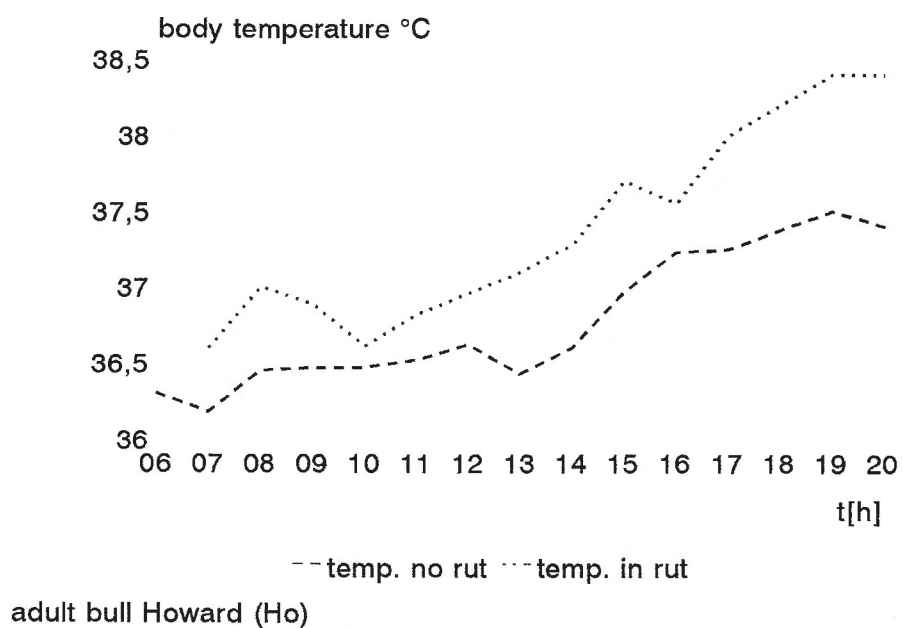


Fig. A13.1: fluctuations of body- and air temperatures



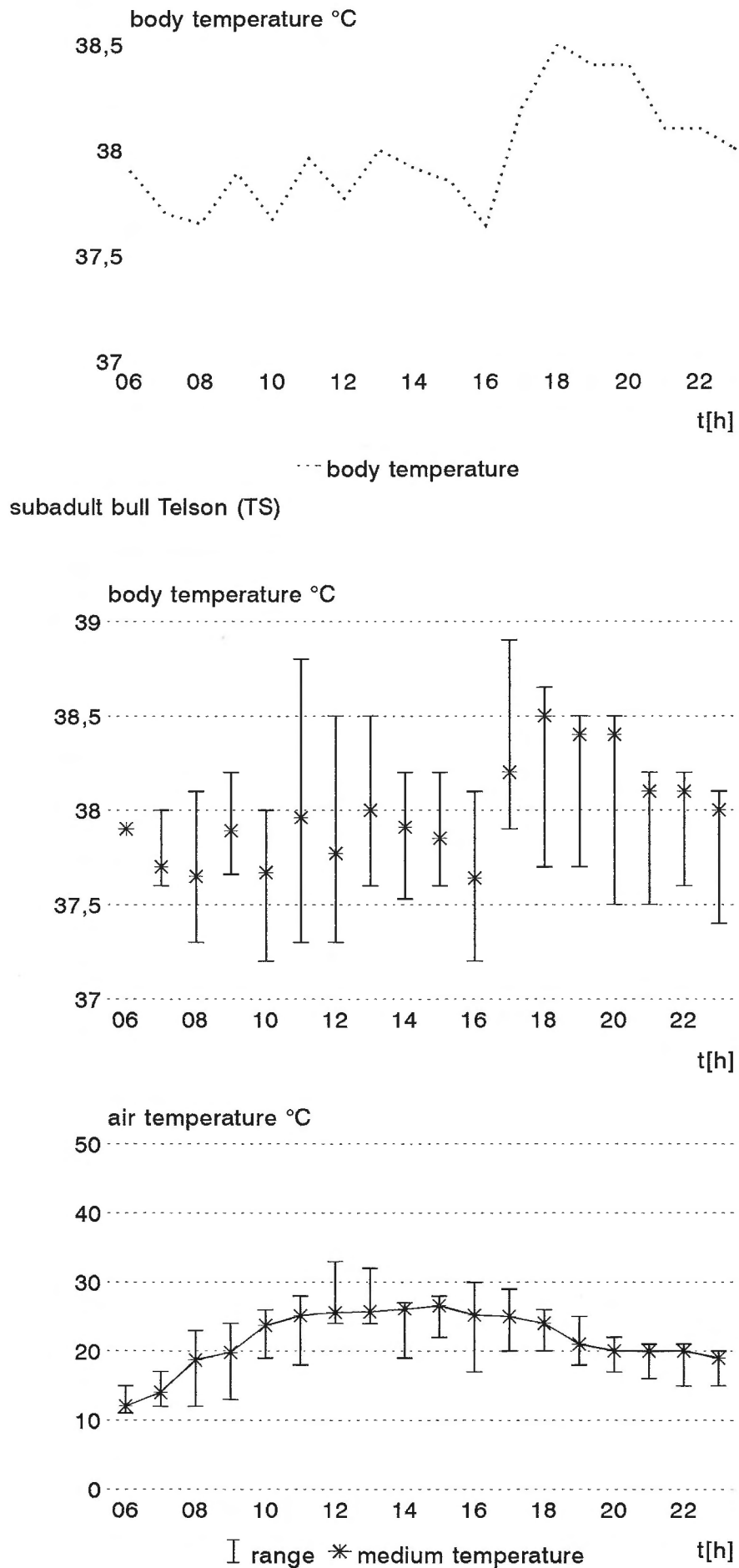


Fig. A13.2: fluctuations of body- and air temperatures

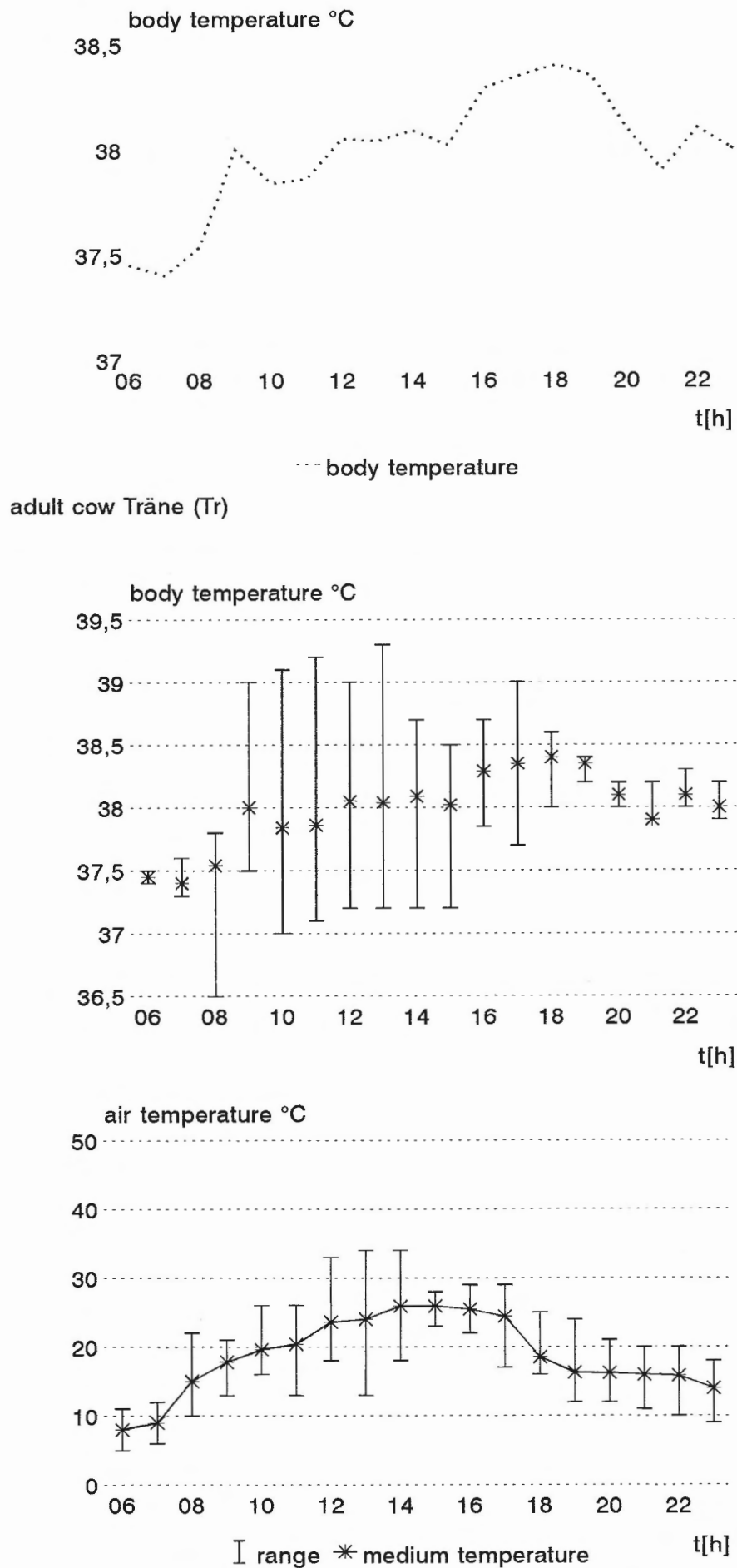


Fig. A13.3: fluctuations of body- and air temperatures

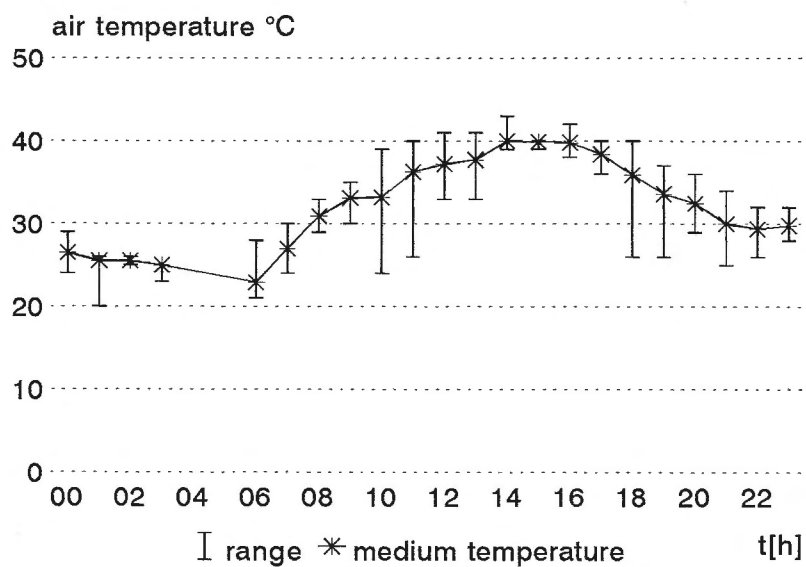
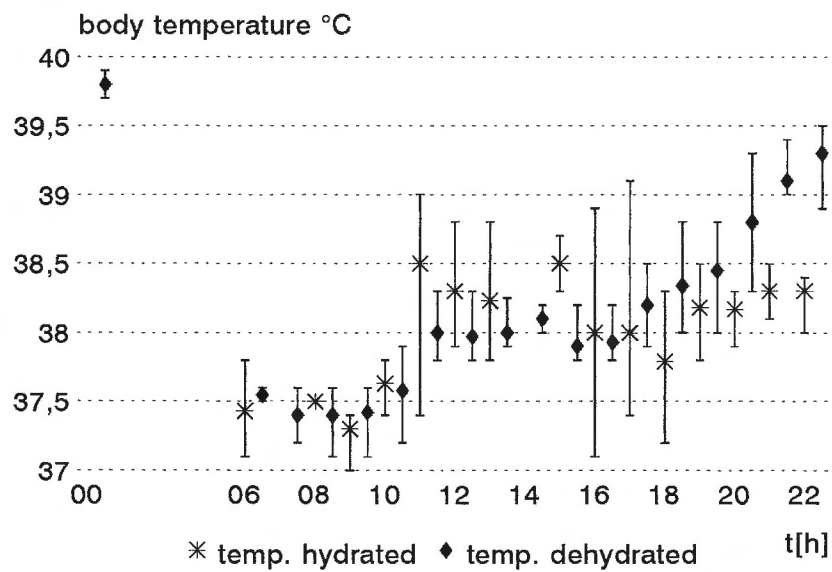
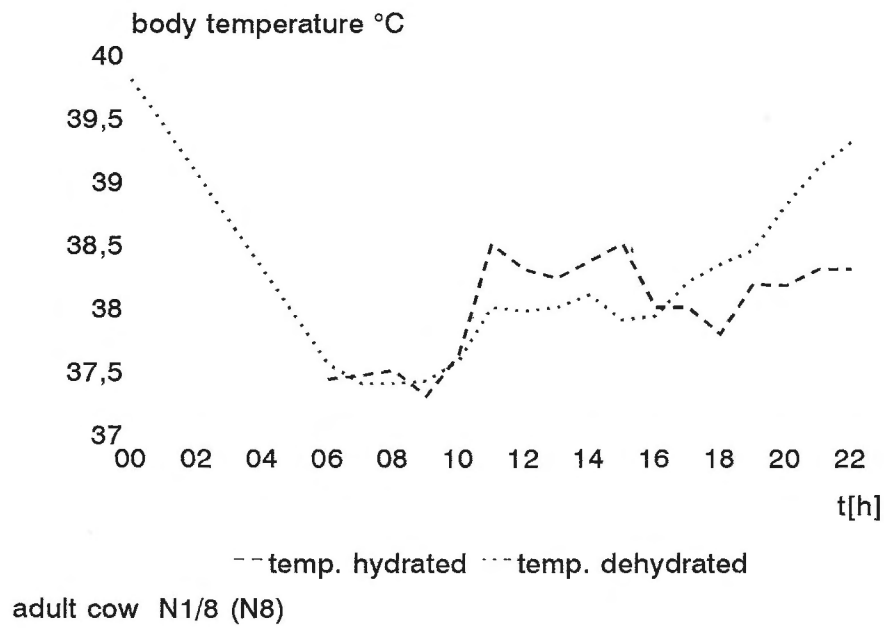


Fig. A13.4: fluctuations of body- and air temperatures

# Appendix

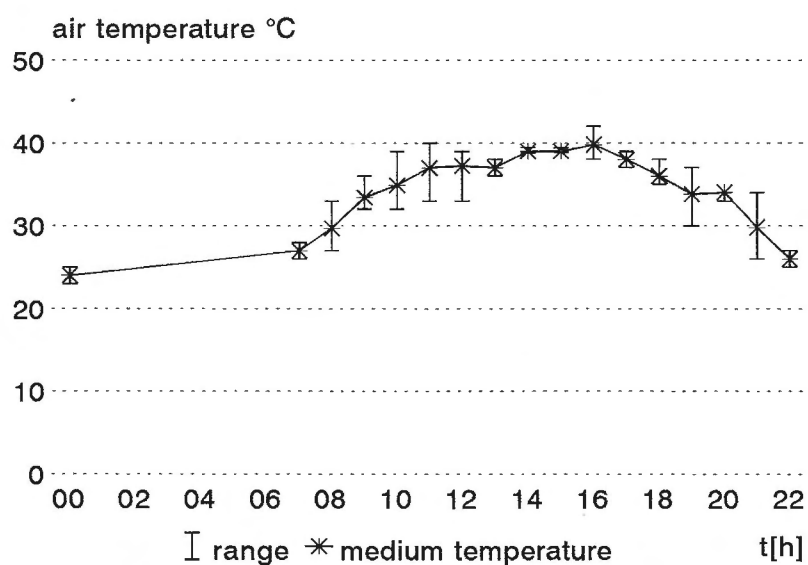
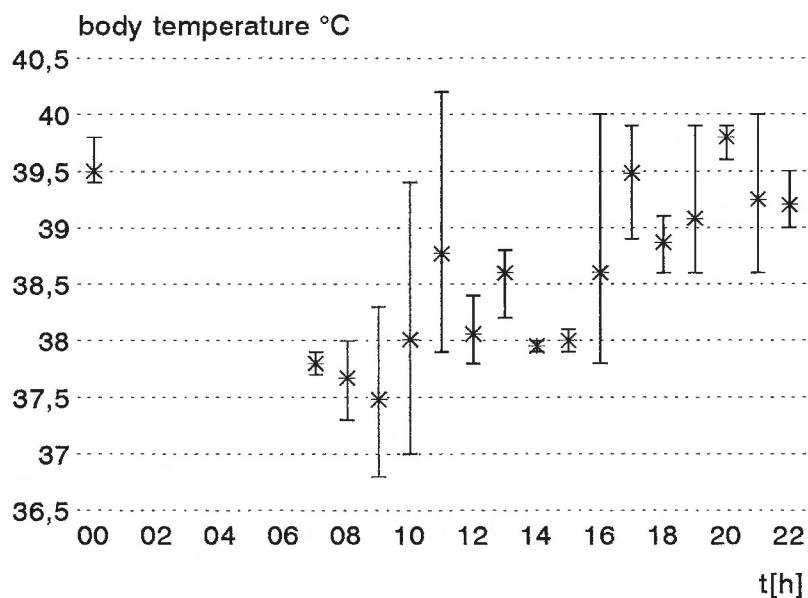
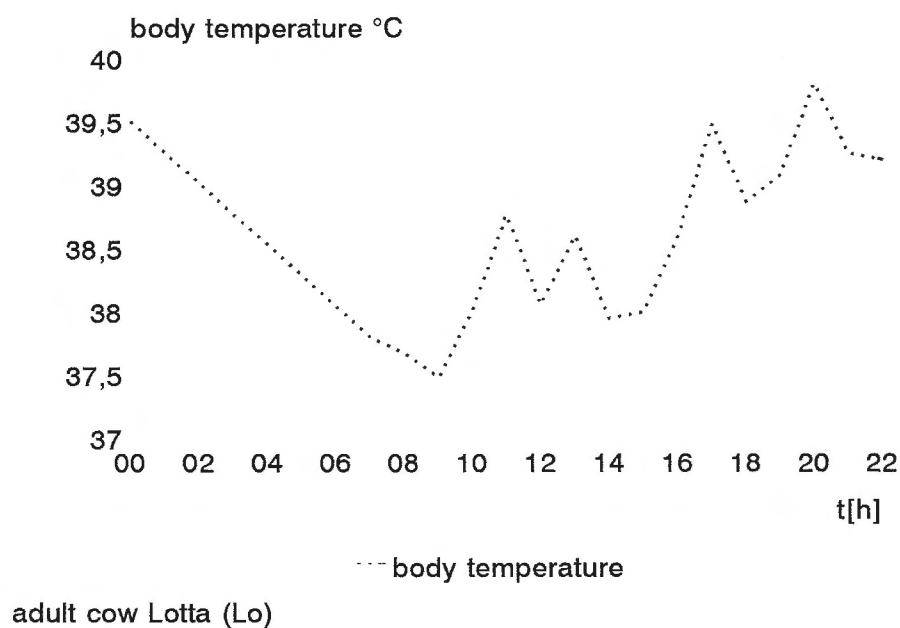


Fig. A13.5: fluctuations of body- and air temperatures

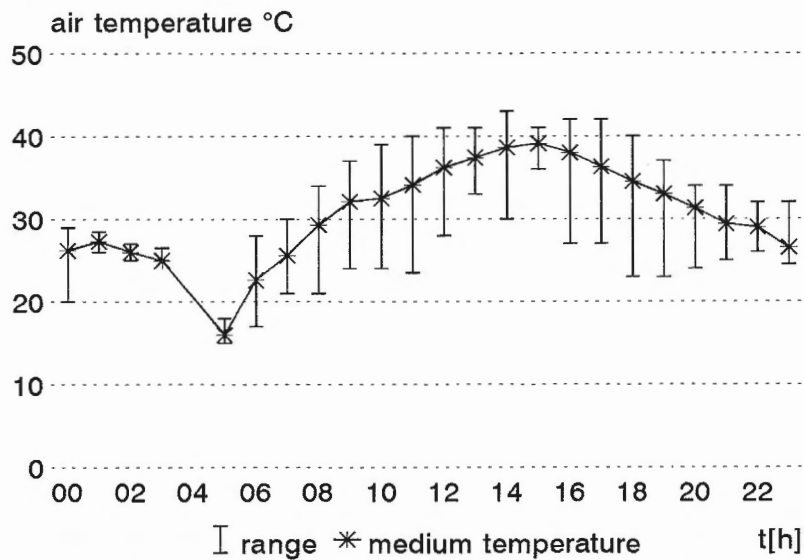
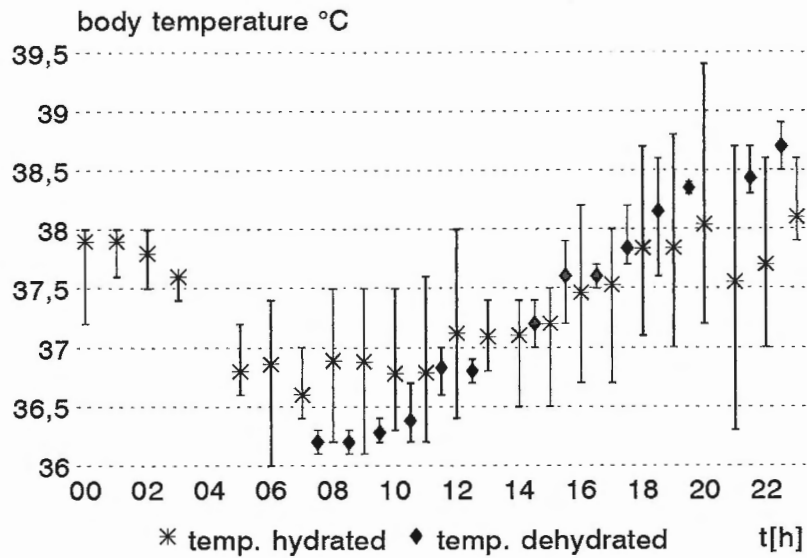
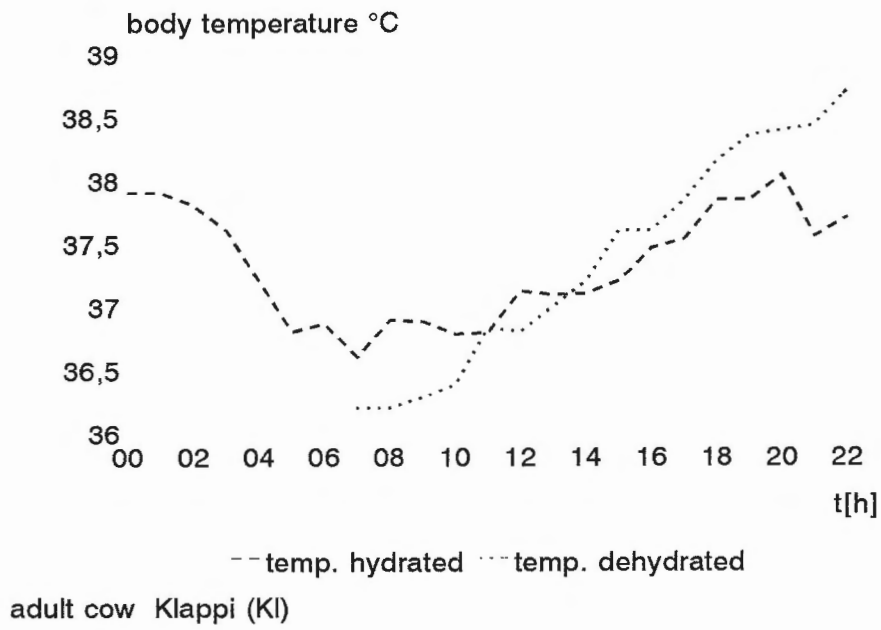


Fig. A13.6: fluctuations of body- and air temperatures

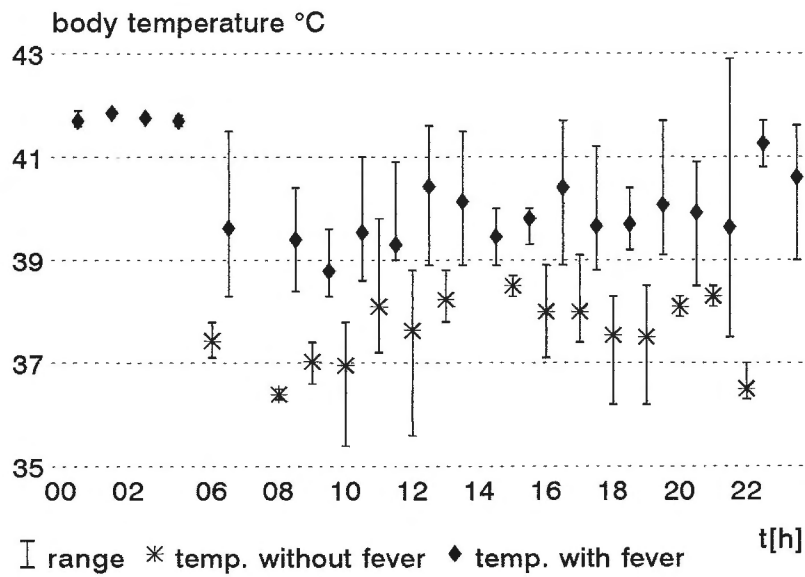


Fig. A13.7: temperature curves of cow N8 with and without fever

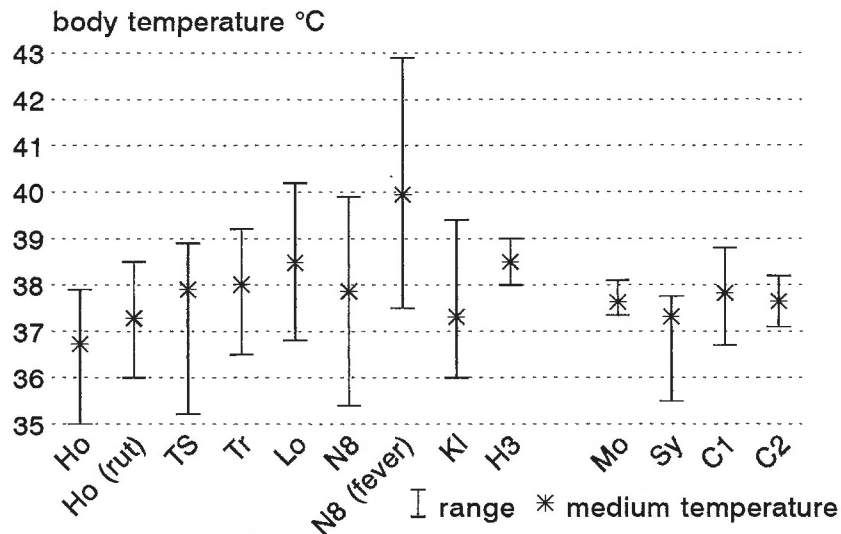
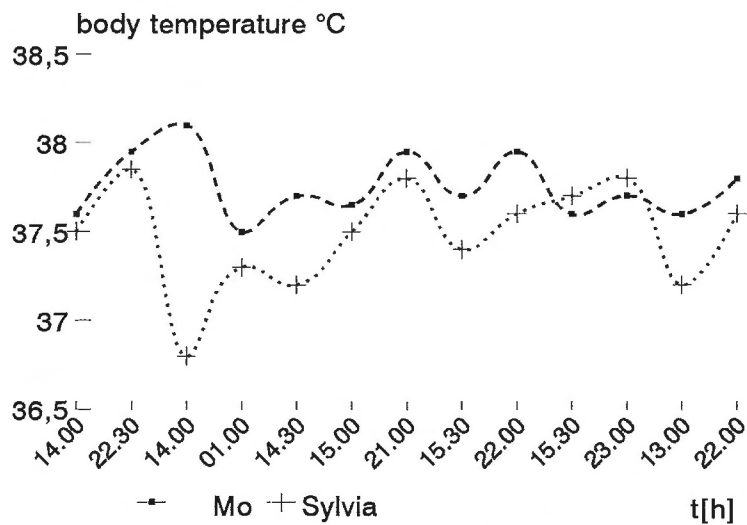


Fig. A13.8: range of body temperatures from 11 dromedaries



Mo = cow, 6 years old; Sylvia = cow, > 30 years old

Fig. A13.9: body temperatures of 2 domestic cows in summer

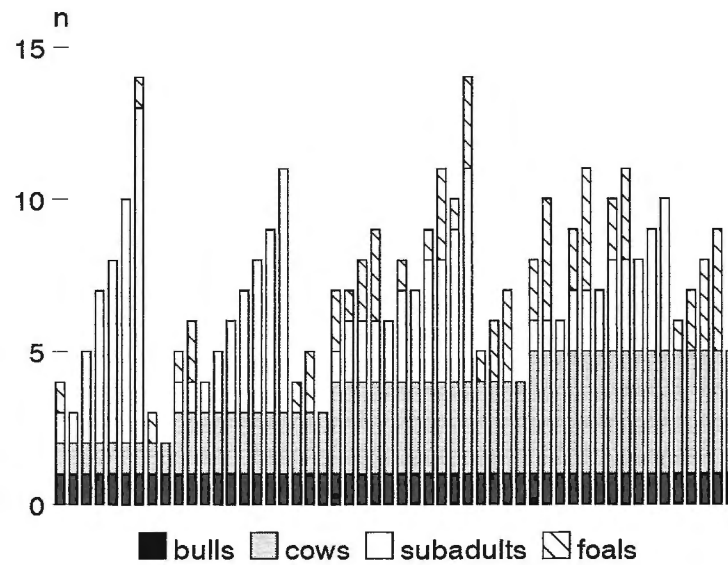


Fig. A14.1: structure of cow groups with herding bull

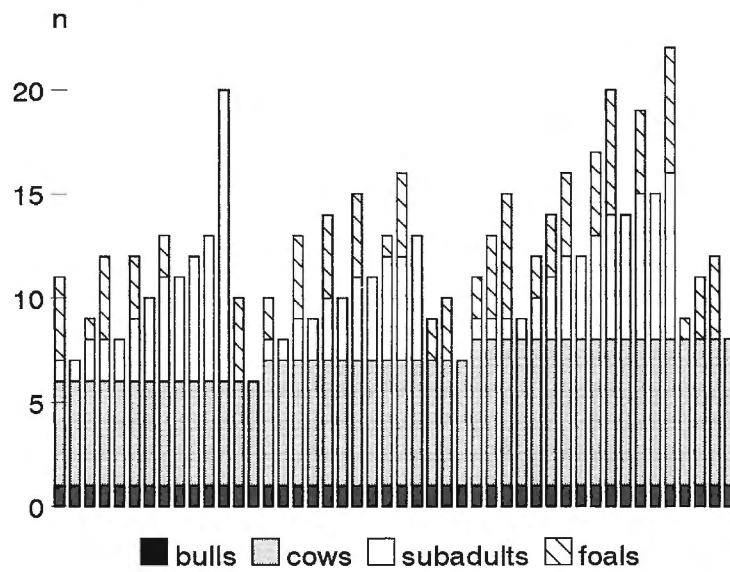


Fig. A14.2: structure of cow groups with herding bull

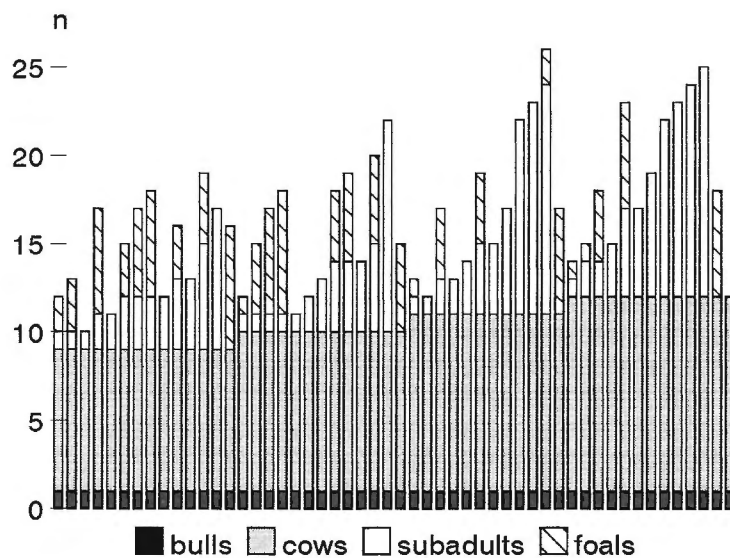


Fig. A14.3: structure of cow groups with herding bull

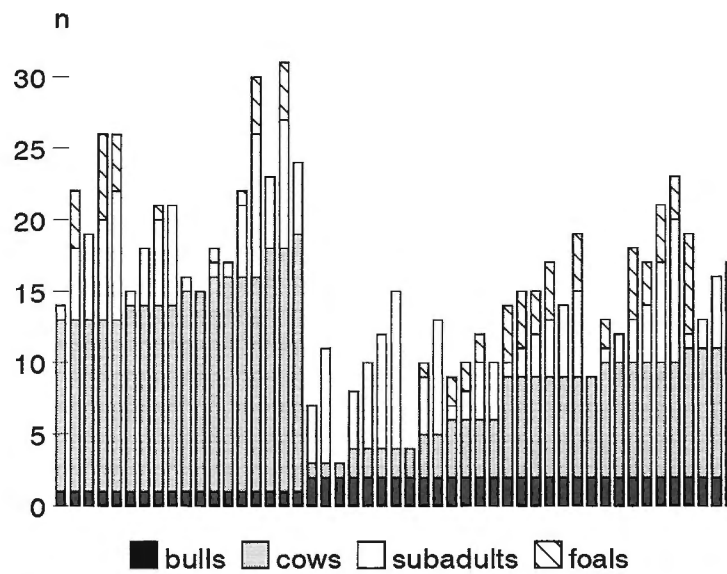


Fig. A14.4: structure of cow groups with herding bull

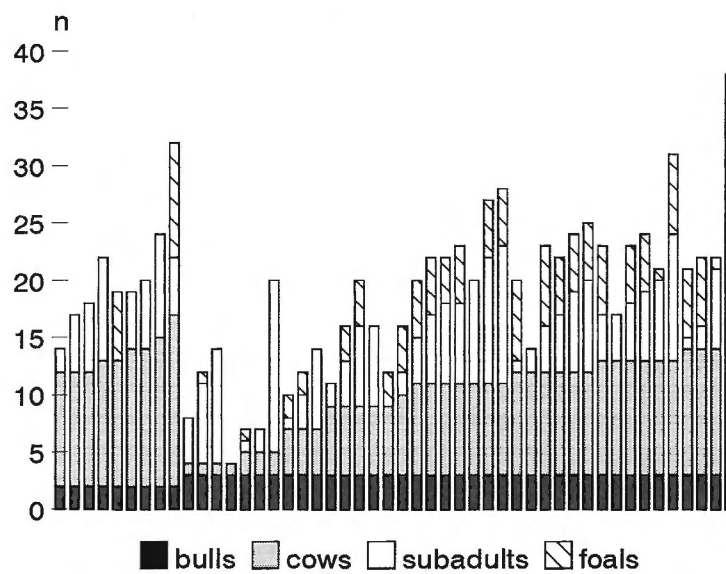


Fig. A14.5: structure of cow groups with herding bull

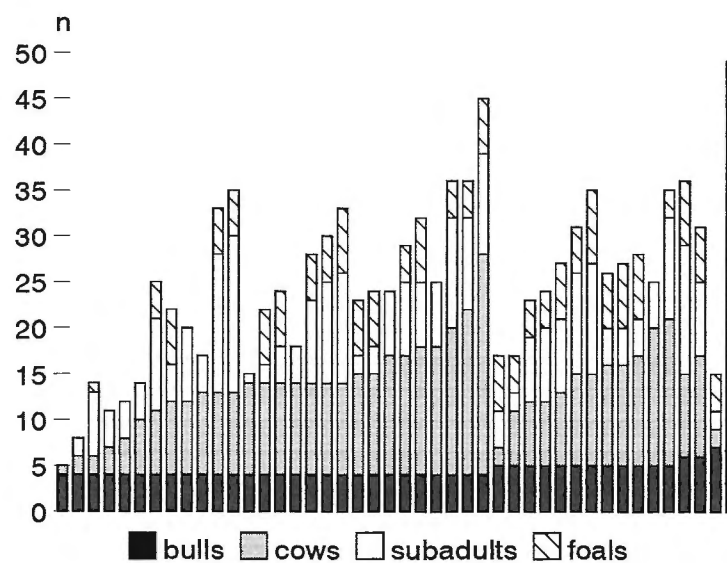


Fig. A14.6: structure of cow groups with herding bull



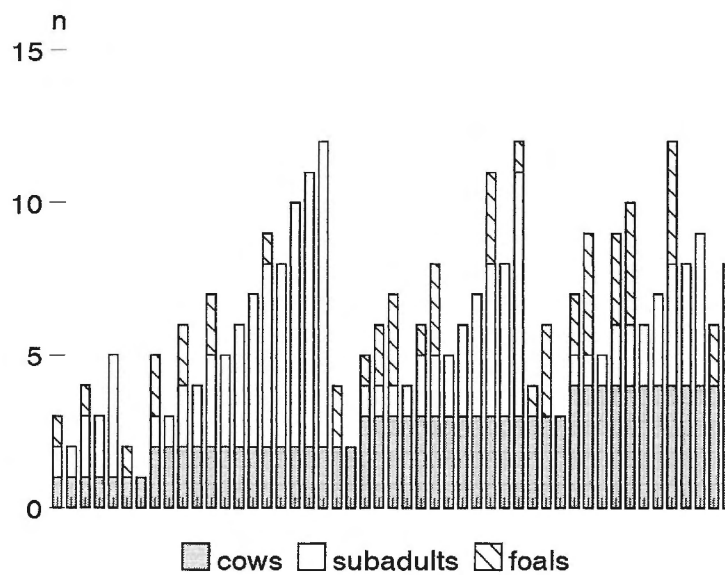


Fig. A14.7: structure of cow groups

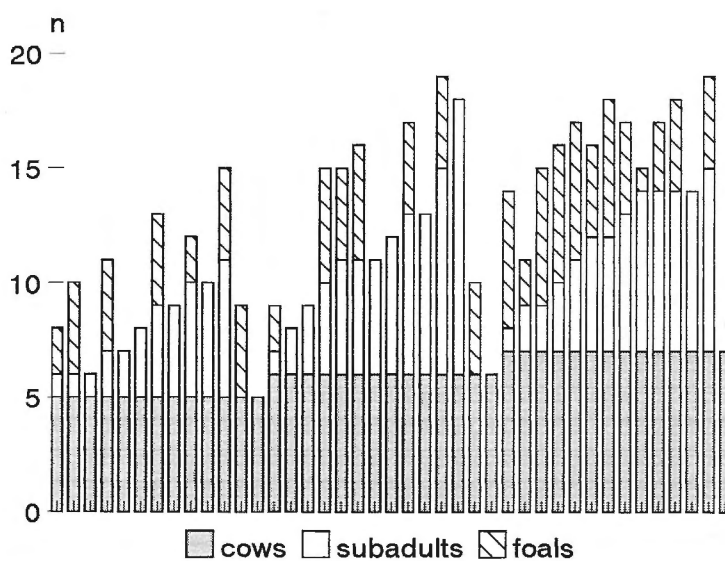


Fig. A14.8: structure of cow groups

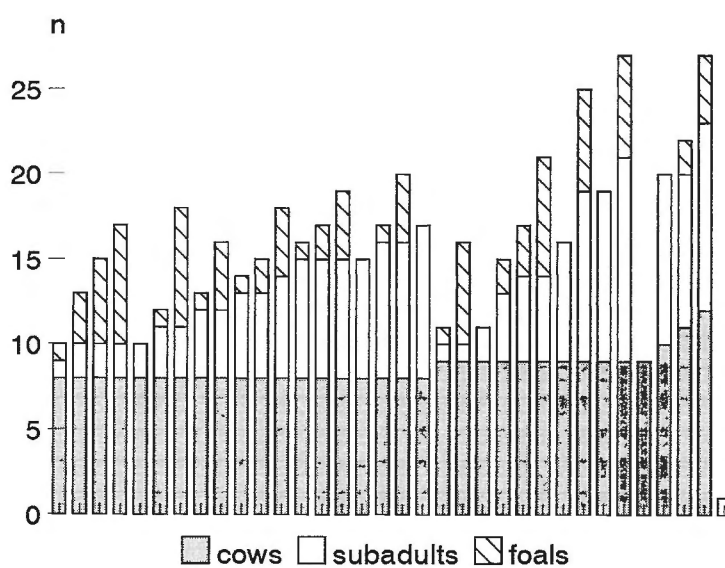


Fig. A14.9: structure of cow groups

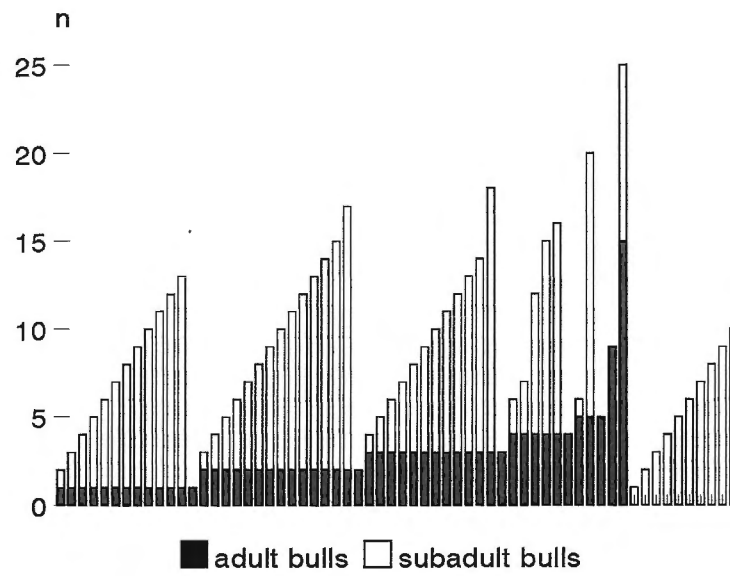
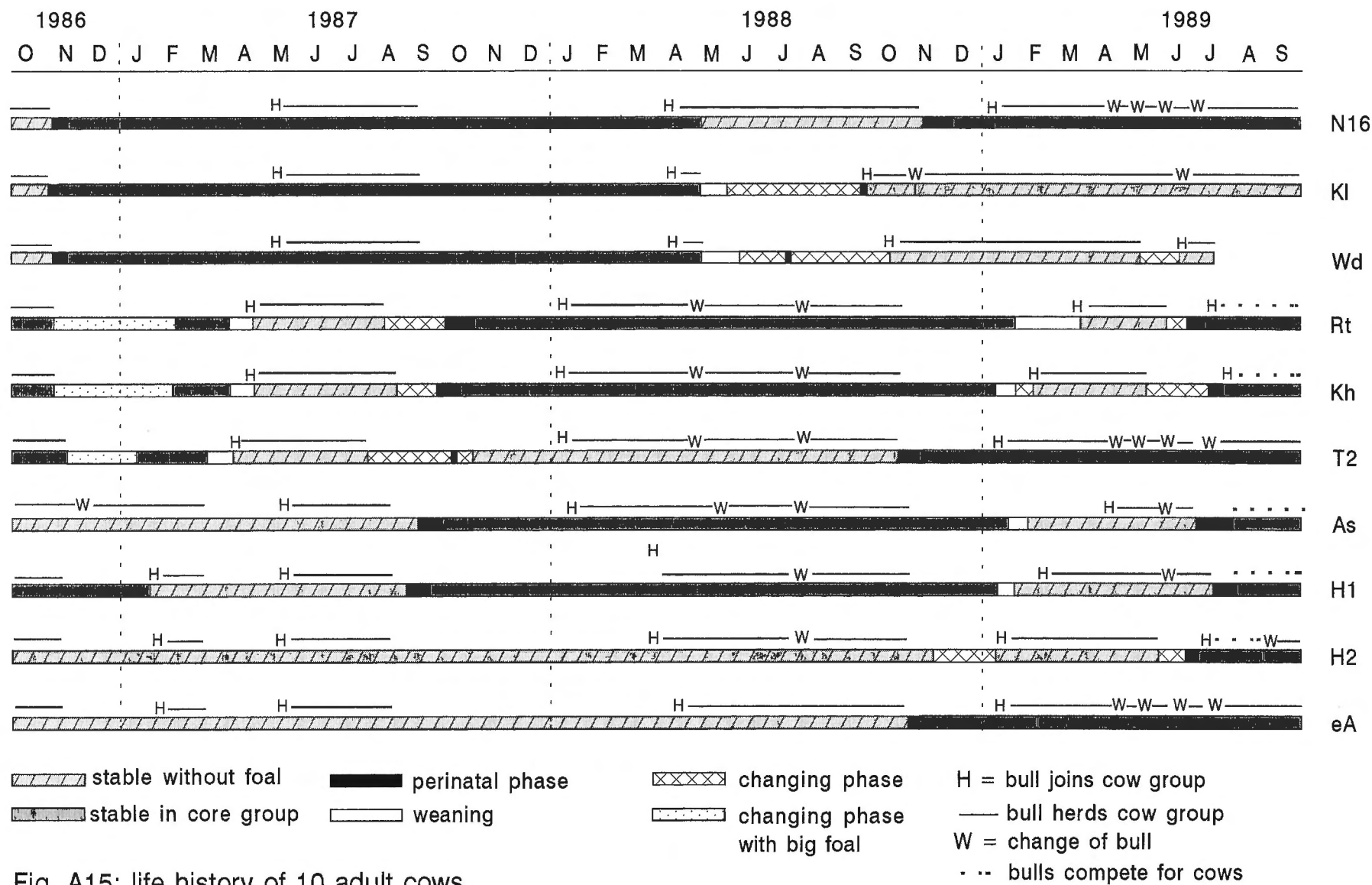


Fig. A14.10: structure of bachelor groups



# Appendix

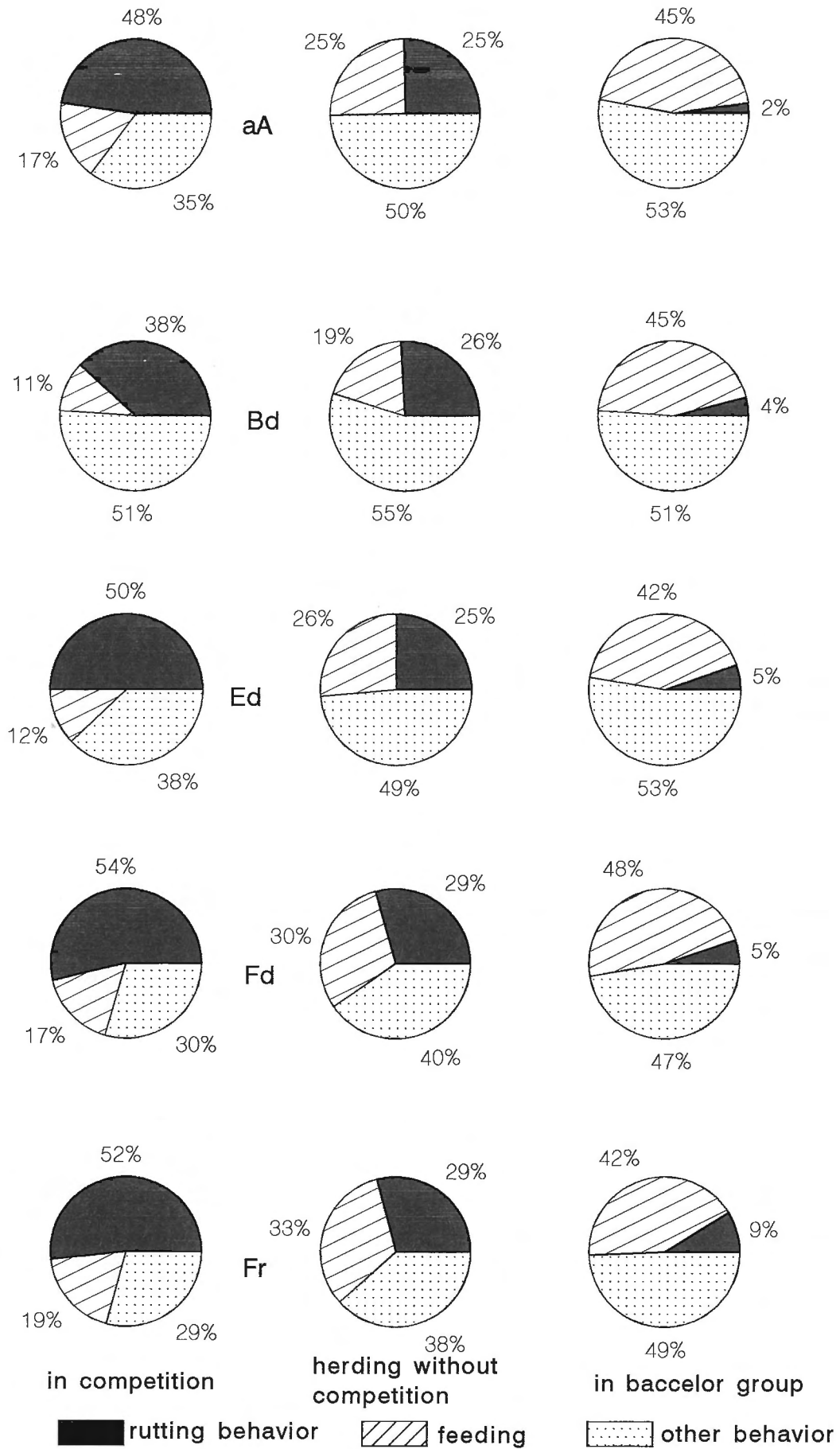


Fig. A16.1: Comparison of the activity of adult bulls

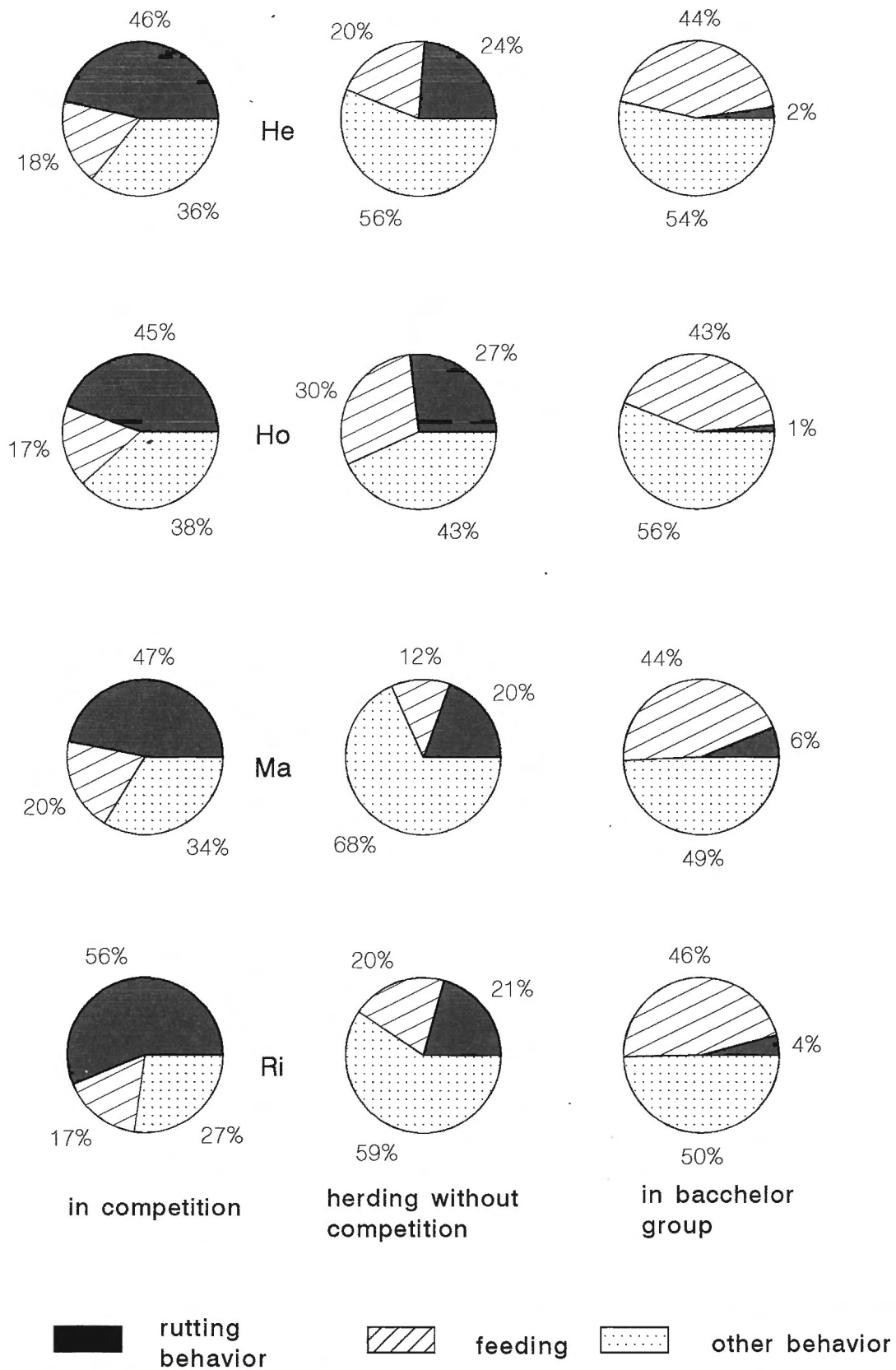


Fig. A16.2: Comparison of the activity of adult bulls

Table AT 5: Percentual daily activity of 9 adult bulls

		aA	Bd	Ed	Fd	Fr	He	Ho	Ma	Ri
I	1	47.7	38.1	50.1	53.8	51.8	46.4	44.7	46.8	56.3
	2	17,1	10.8	12	16.7	19	17.9	17	19.5	16.5
	3	16.2	14.5	10.1	8.4	8.8	8.9	10.8	8.4	6.3
	4	1.8	15.1	8.4	3.9	2.5	6.3	3.9	4.5	1.8
	5	10.8	17.8	16	12.5	12.7	11.6	14.1	9.1	13
	6	6.4	3.7	3.4	4.7	5.2	8.9	9.5	11.7	6.1
II	1	25.3	25.9	25	29.4	29.1	23.8	26.9	19.5	20.7
	2	25	19.2	26.4	30.3	32.5	20.1	30	12.2	19.9
	3	16.1	13	11.5	11.2	12.5	10.2	10.3	19.5	20.7
	4	6.7	18.9	12.8	8.5	3.8	16.5	8.4	17.1	7.6
	5	23.4	17.5	19.6	15.3	12.5	26.4	20.5	17.1	26.8
	6	3.5	5.5	4.7	5.3	9.6	3	3.9	14.6	4.3
III	1	2.2	4	5.3	5.2	9.8	2.3	1.4	6.3	4.2
	2	44.9	44.9	42.1	47.5	46.4	44.2	42.5	44.4	46.1
	3	8.3	12.4	13.2	10.3	9.8	9.3	9.2	8.3	13.6
	4	7.5	3.6	11.5	5.7	5.4	14	9.2	17.4	7.8
	5	16.1	23.1	20.1	20	20.5	7	28	13.9	19.4
	6	21	12	7.8	11.3	8.1	23.2	9.7	9.7	8.9

I = competes for cows  
 II = herding without competition  
 III = in bacchelor group

1 = rutting behavior  
 2 = feeding  
 3 = walking

4 = standing  
 5 = lying  
 6 = other behavior

The verification of the results concerning the proportional day activity consists of dependent random samples, since the activities of the same animals were tested and compared in relation to different situations. The results were tested for statistical significance with the Wilcoxon-test (DIEHL/KOHR 1987). The permissible error probability is usually around  $p = 0.05$  and is indicated in terms of figures by the significance threshold  $z_{crit}$  for the random samples to be compared. The respective calculated significance is indicated in the tables by  $z_{ber}$ , with  $z_{ber}$  being at least as big as  $z_{crit}$  in order to be significant on the level of 0.05 (\*). If the error probability is below  $p = 0.01$  the differences are called highly significant (\*\*). If  $z_{ber}$  does not reach the value of  $z_{crit}$ , the observed differences are random, i.e. not significant, and are shown in Table AT6 with a (-).

Table AT6: Significance test of the proportional day activity of 9 adult bulls according to the Wilcoxon-test.

	I : II	S	I : III	S	II : III	S
rutting						
$z_{crit}$	0.0064		0.0064		0.0064	
$z_{ber}$	2.7248	**	2.7248	**	2.7248	**
feeding						
$z_{crit}$	0.0178		0.0064		0.0064	
$z_{ber}$	2.3694	*	2.7248	**	2.7248	**
walking						
$z_{crit}$	0.0756		0.7223		0.033	
$z_{ber}$	1.7771	*	0.3554	-	2.1325	*
standing						
$z_{crit}$	0.0064		0.0756		0.4069	
$z_{ber}$	2.7248	**	1.7771	*	0.8293	*
lying						
$z_{crit}$	0.0178		0.0092		0.9057	
$z_{ber}$	2.3694	*	2.6063	**	0.1185	-
others						
$z_{crit}$	0.7223		0.0129		0.033	
$z_{ber}$	0.3554	-	2.4879	*	2.1325	*

I = Competition for cows  
II = Herds without competition situation  
III = Bachelor group

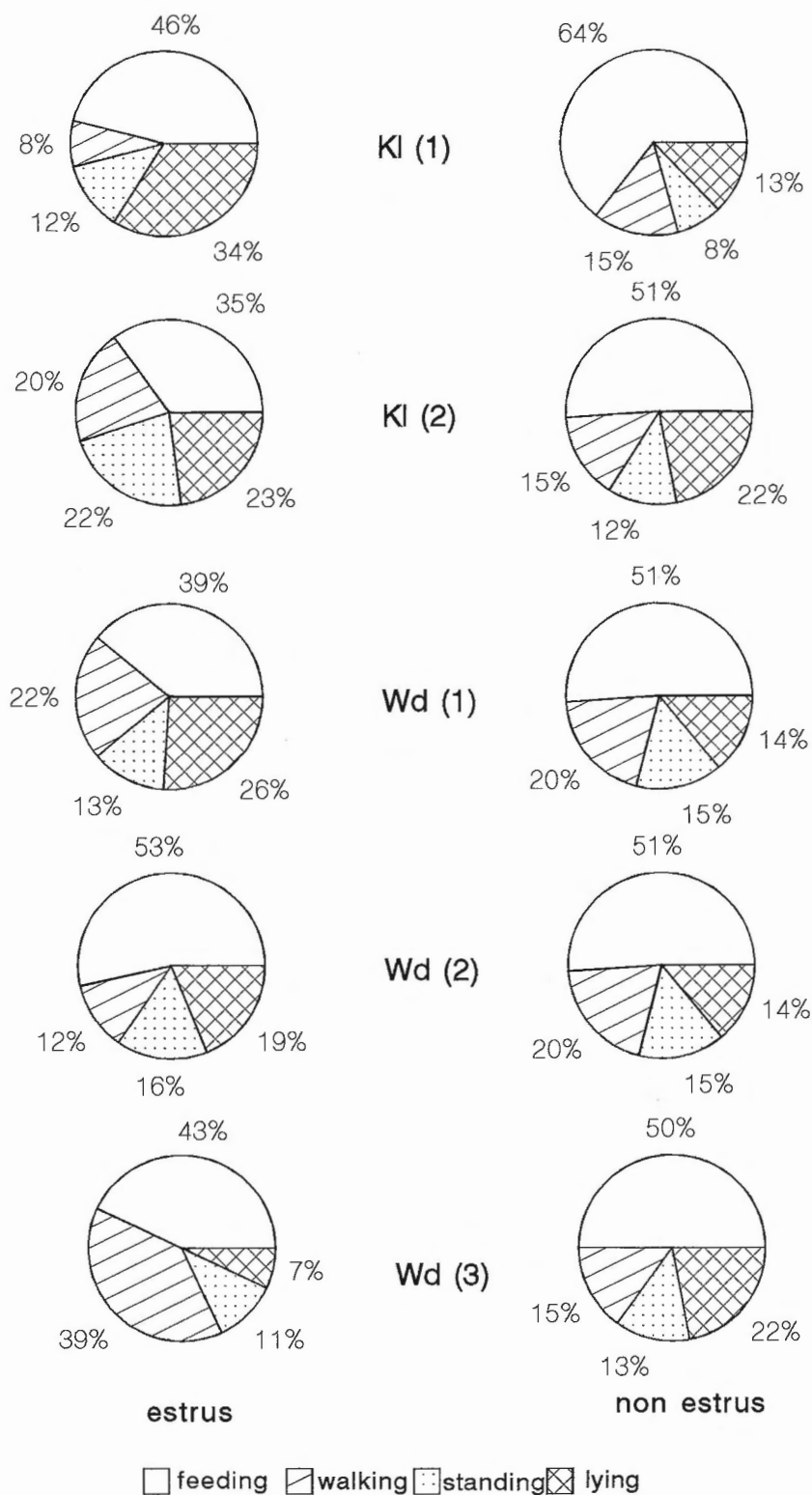


Fig. A.17.1: Comparison of activity of adult cows



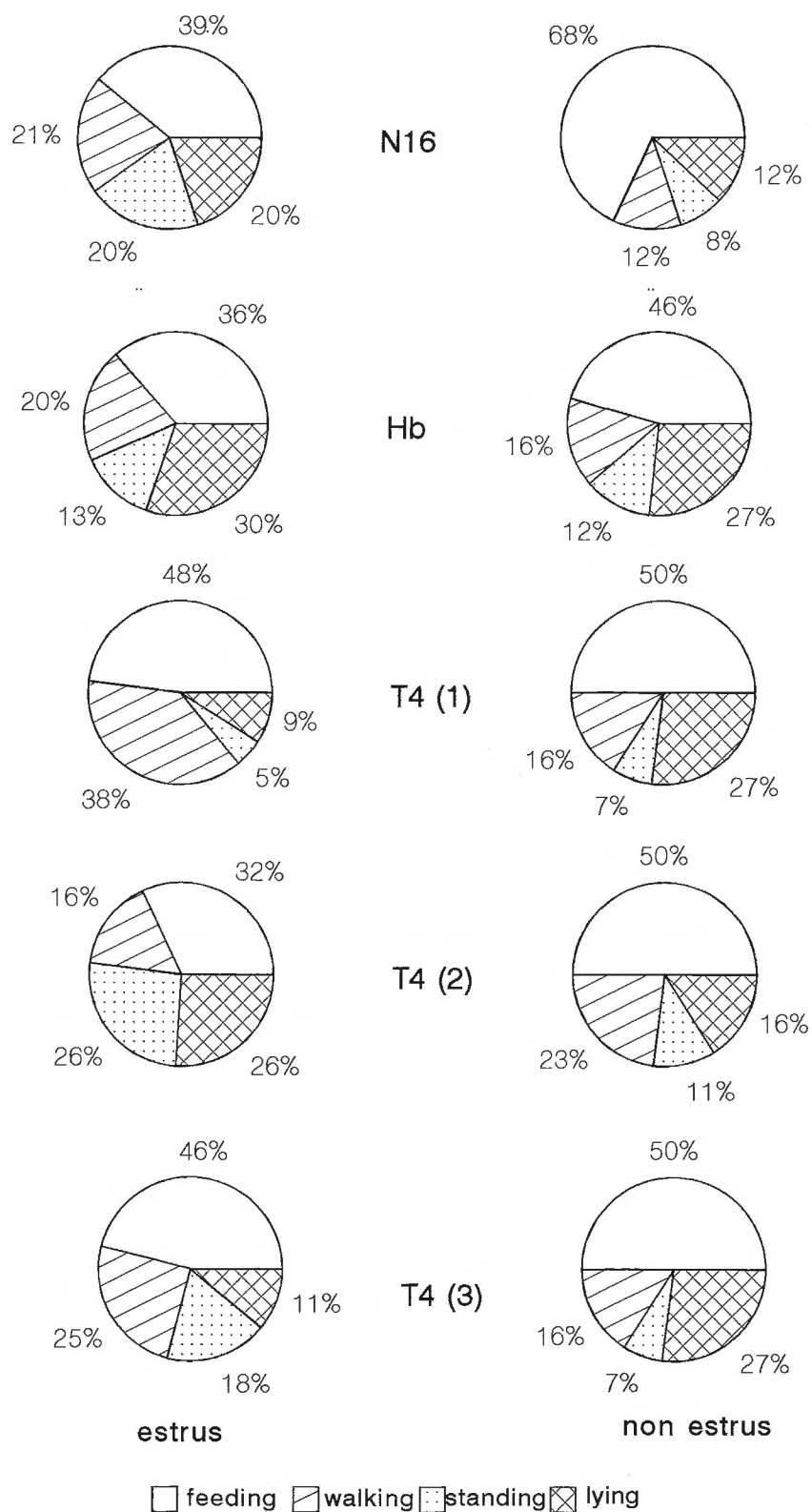


Fig. A17.2: Comparison of activity of adult cows

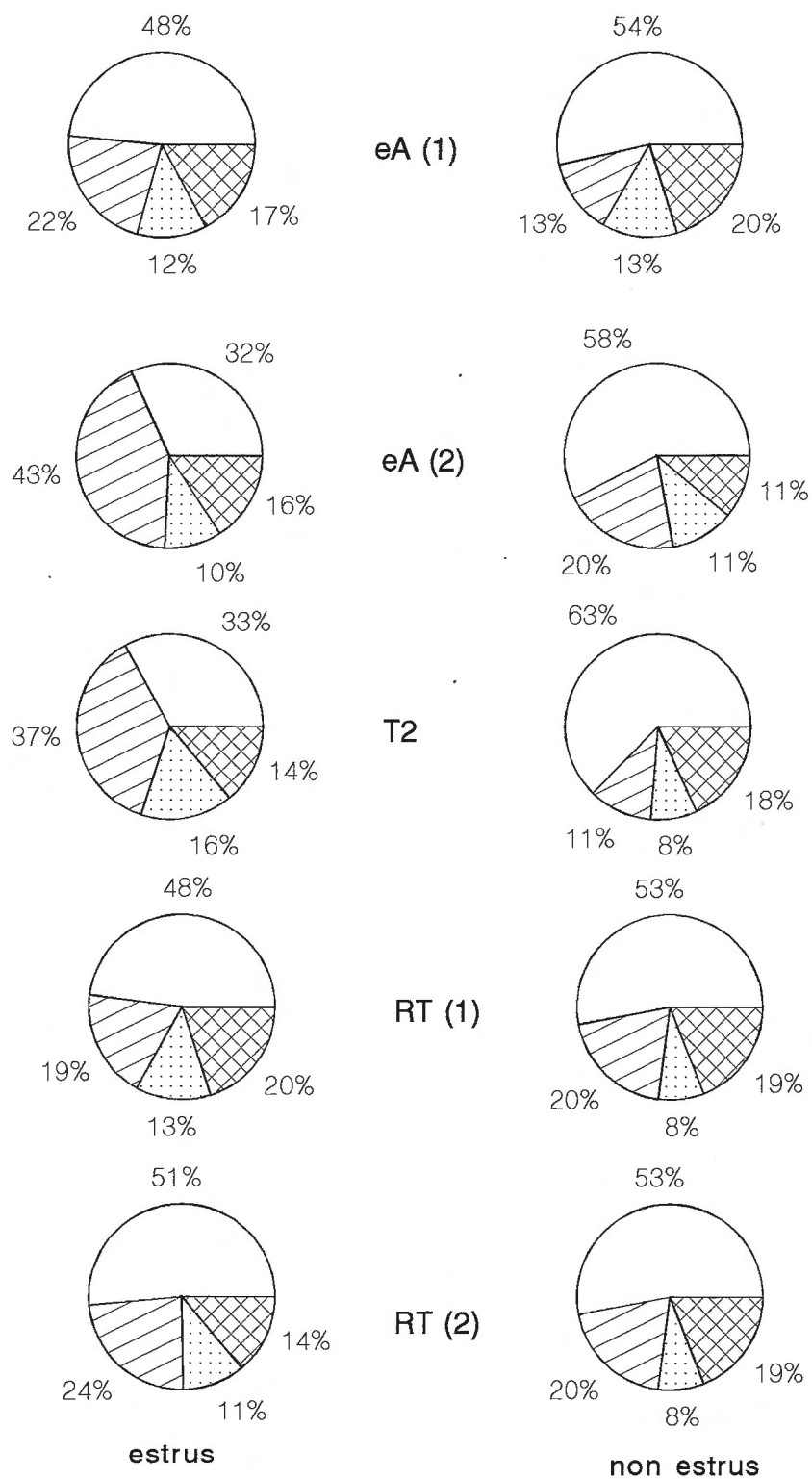


Fig. A17.3: Comparison of activity of adult cows

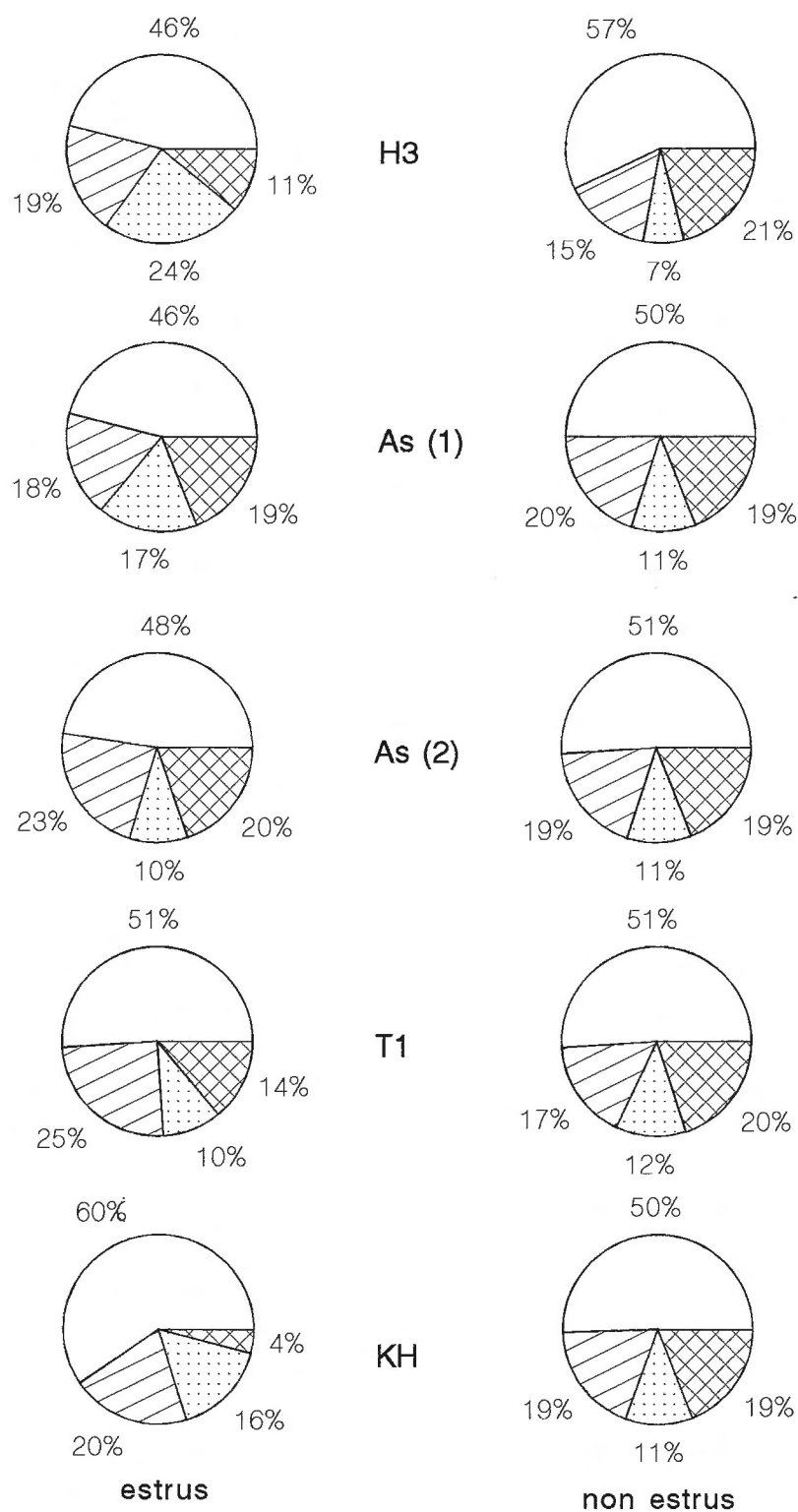


Fig. A17.4: Comparison of activity of adult cows

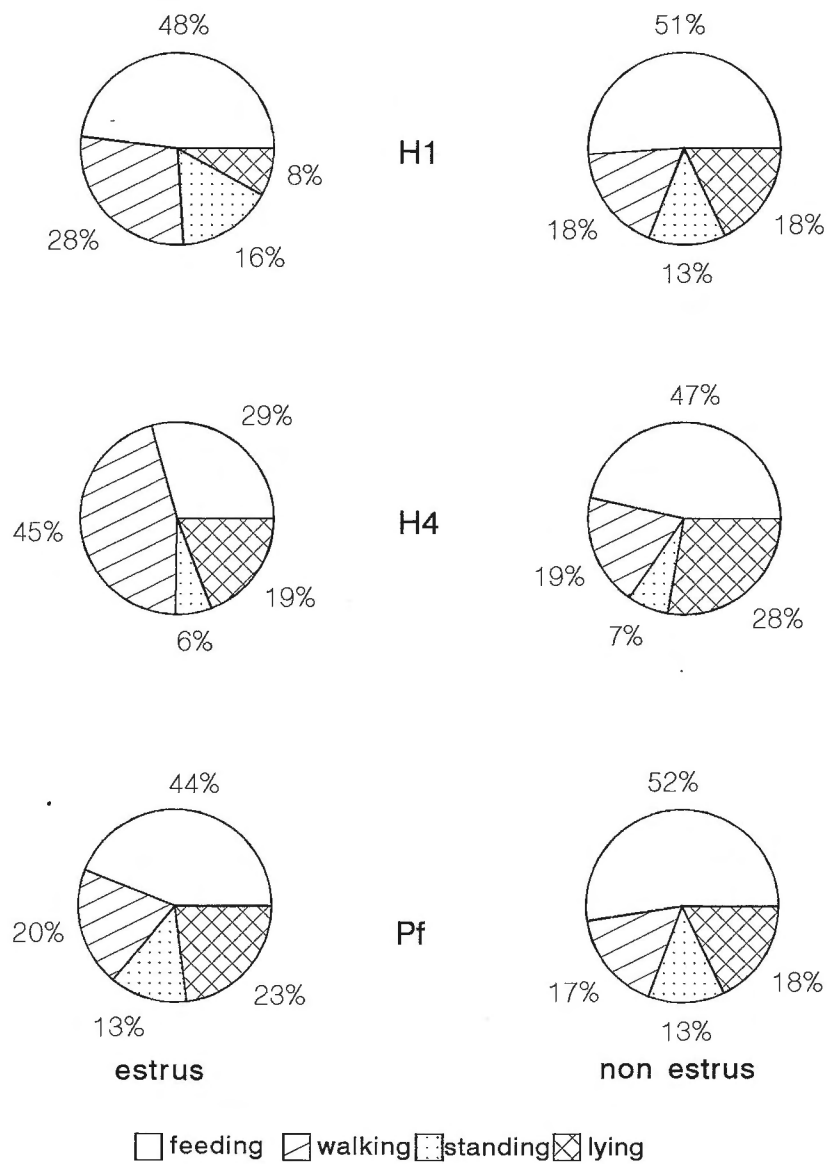


Fig. A17.5: Comparison of activity of adult cows

The results of the proportional day activity of the cows at the time of the estrus compared with normal times were tested for statistical significance as dependent random samples with the Wilcoxon-test. Explanations to the significance threshold ref. Table AT6.

Table AT7: Significance test of the proportional day activity of 23 adult cows at the time of the estrus compared with times in which the cows were not in estrus

	$Z_{crit}$	$Z_{ber}$	S	N(+)	N(-)	N(+/-)
feed.	0.00017	3.75326	**	2	21	
walk.	0.00056	2.77161	*	18	4	1
stand.	0.38273	0.87287	*	13	8	2
lying	0.83116	0.21320	-	10	12	1

N(+) = Number of animals whose activity was more intensive

N(-) = Number of animals whose activity was less intensive

N(+/-) = Number of animals whose activity was not different

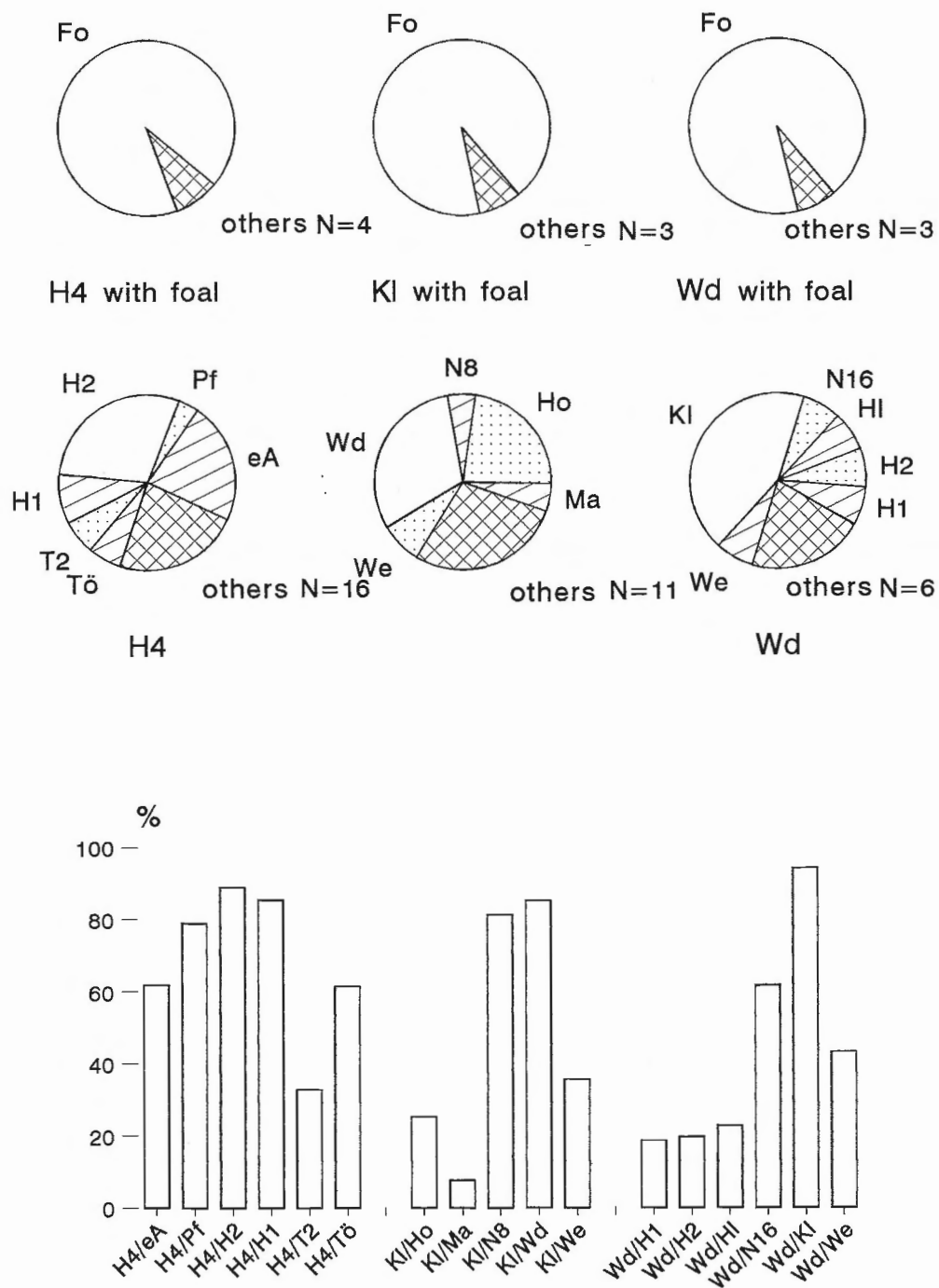


Fig. A18.1: nearest neighbours of adult cows with and without foal in relation to the percentage of mutual sightings

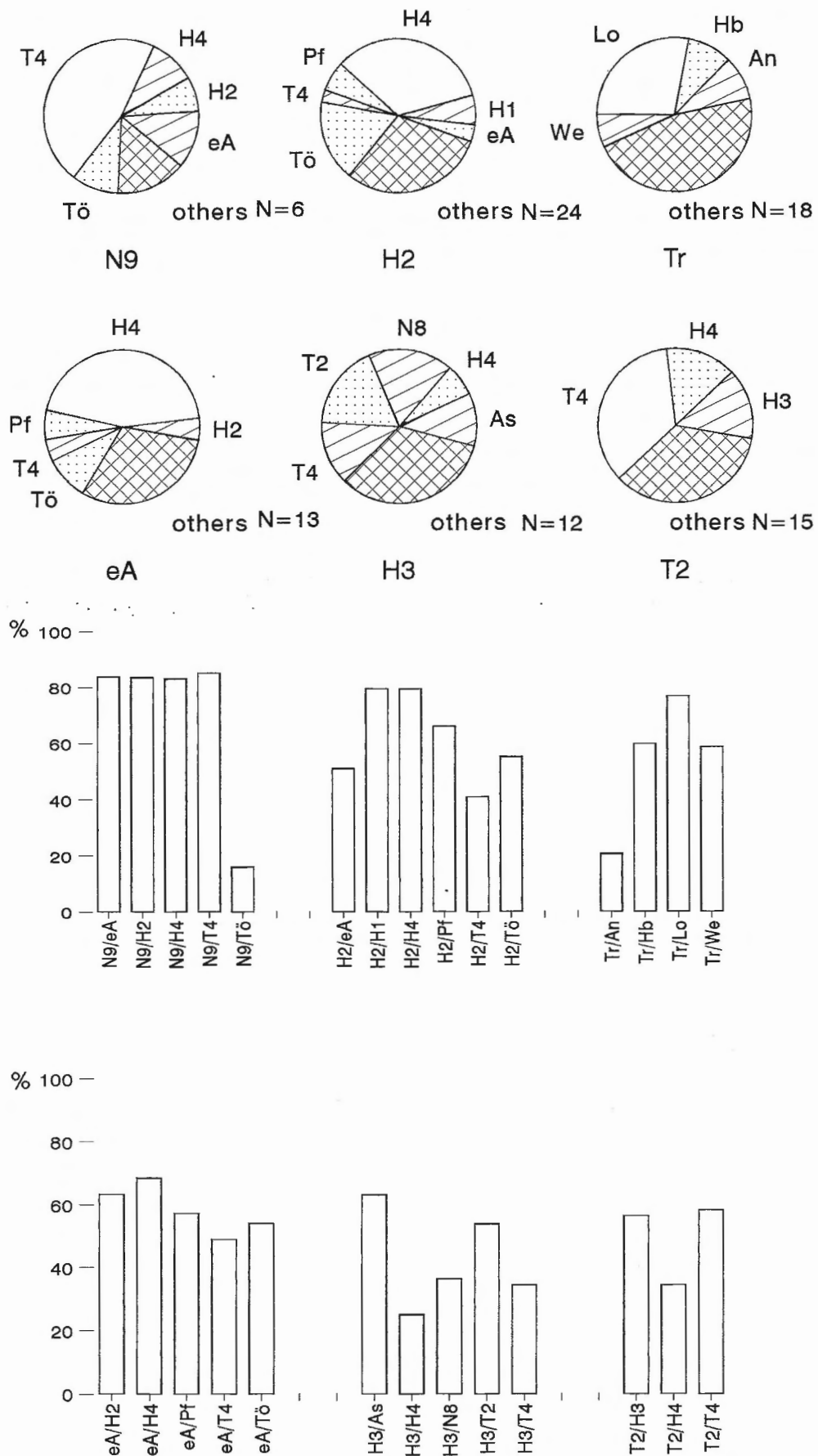


Fig. A18.2: nearest neighbours of adult cows in relation to the percentage of mutual sightings

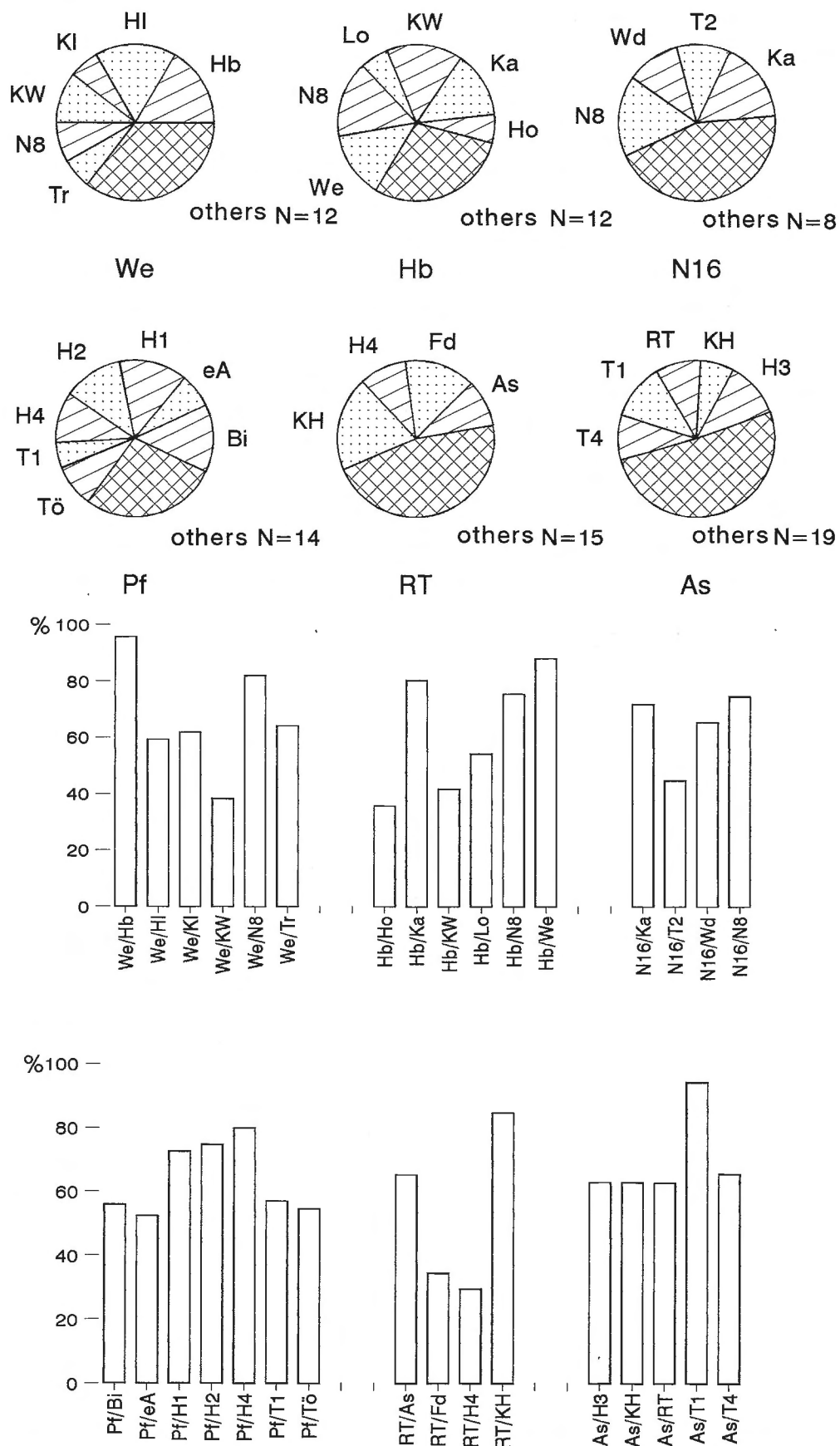


Fig. A18.3: nearest neighbours of adult cows in relation to the percentage of mutual sightings



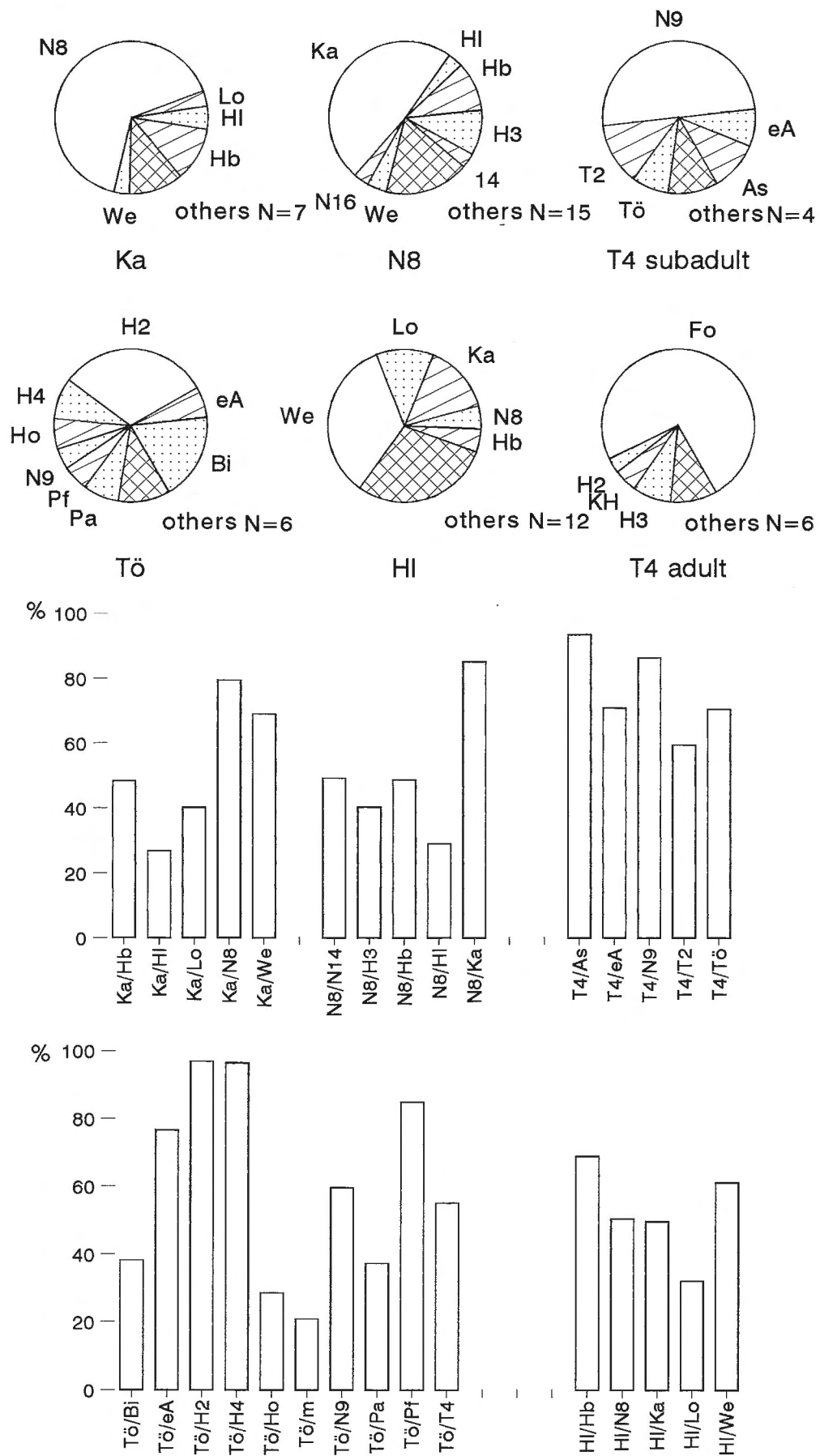


Fig. A18.4: nearest neighbours of subadult cows in relation to the percentage of mutual sightings

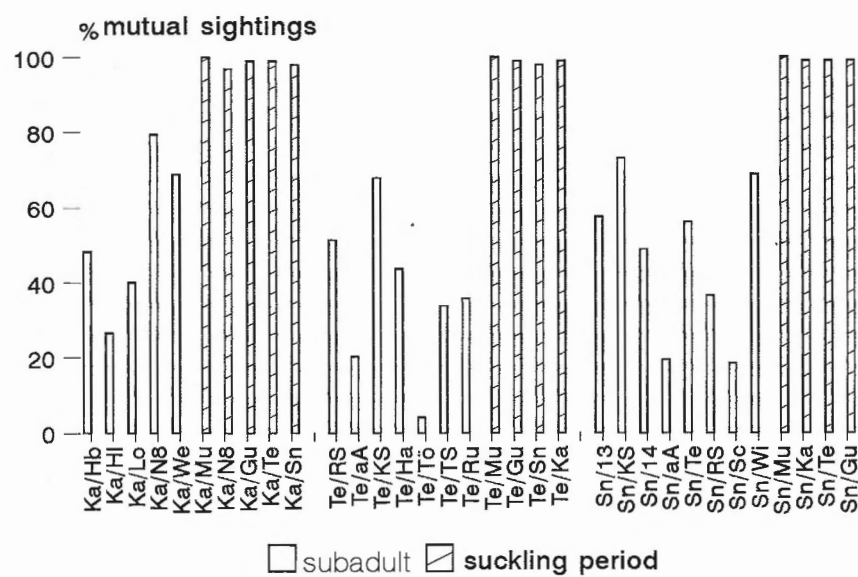
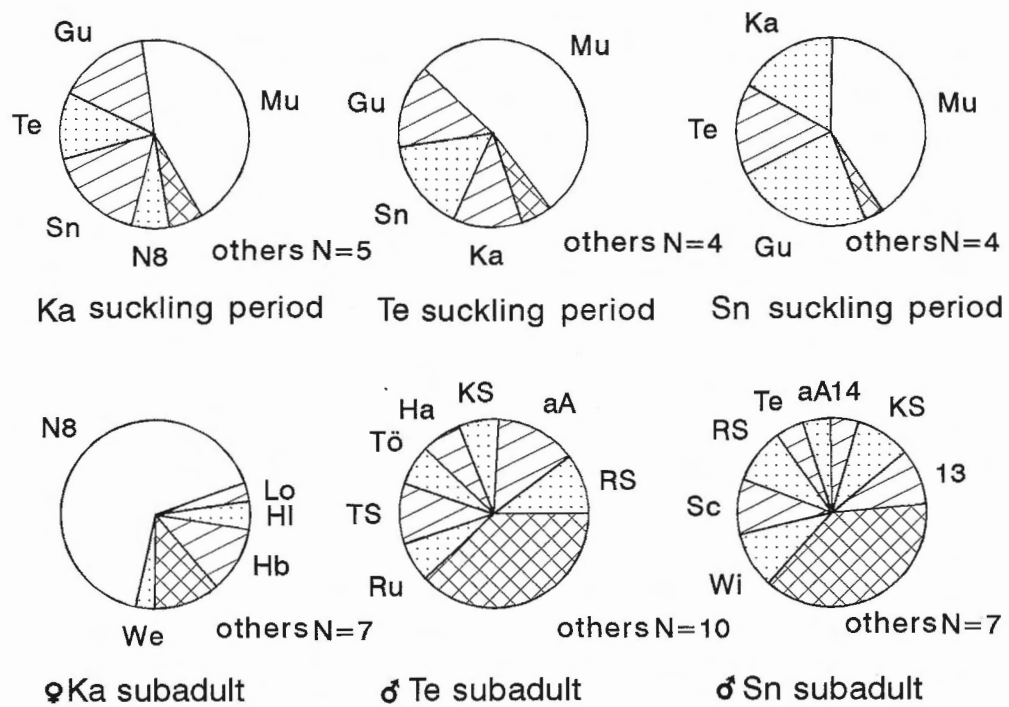


Fig. A18.5: nearest neighbours of foals from one core group at daily resting periods in dependence of their age

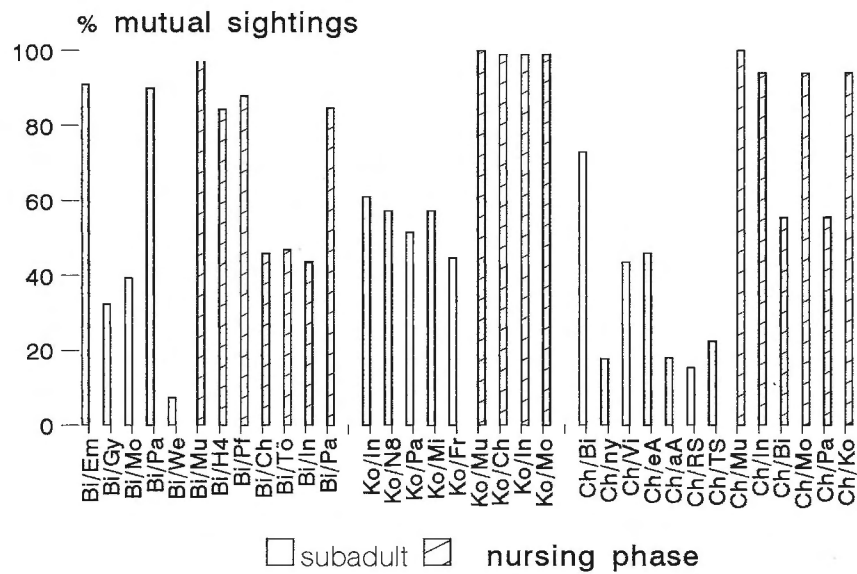
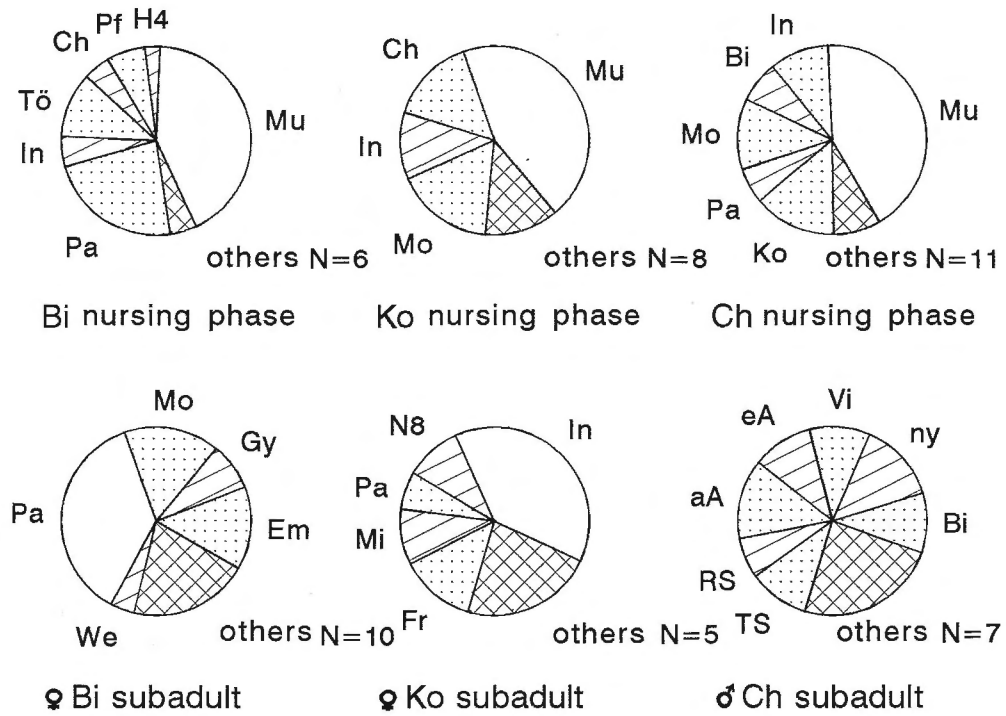


Fig. A18.6: Nearest neighbors of calves from one core group in relation to their age