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A CONTRIBUTION TO THE VEGETATIONAL HISTORY
OF UPPER TEESDALE

By

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(Hatfield College)

Thesis presented for the Degree of Doctor of
Philosophy in the Faculty of Science in the
University of Durham.

March, 1970.



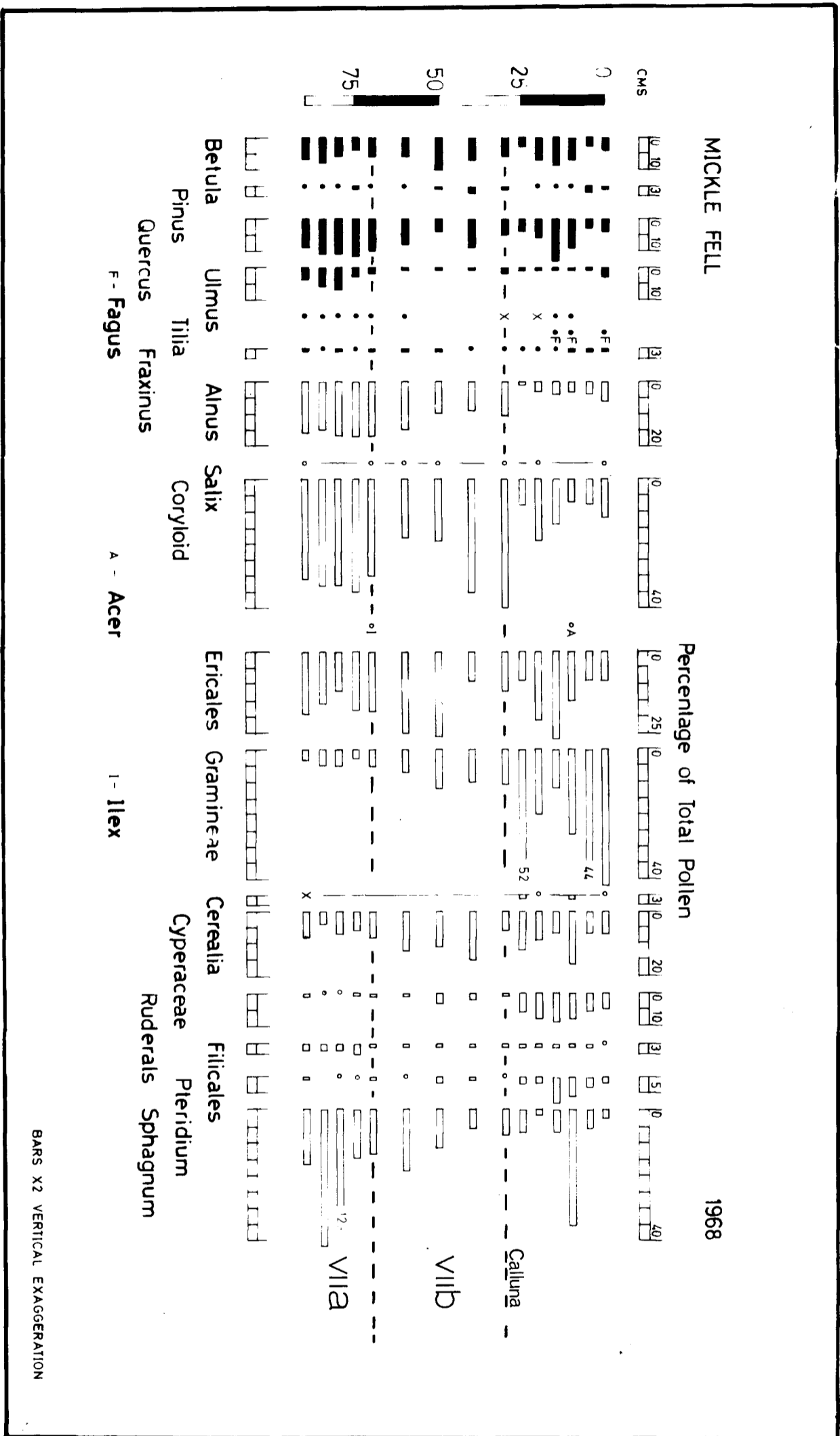


FIG. 52. Ruderals as in Figure 51.



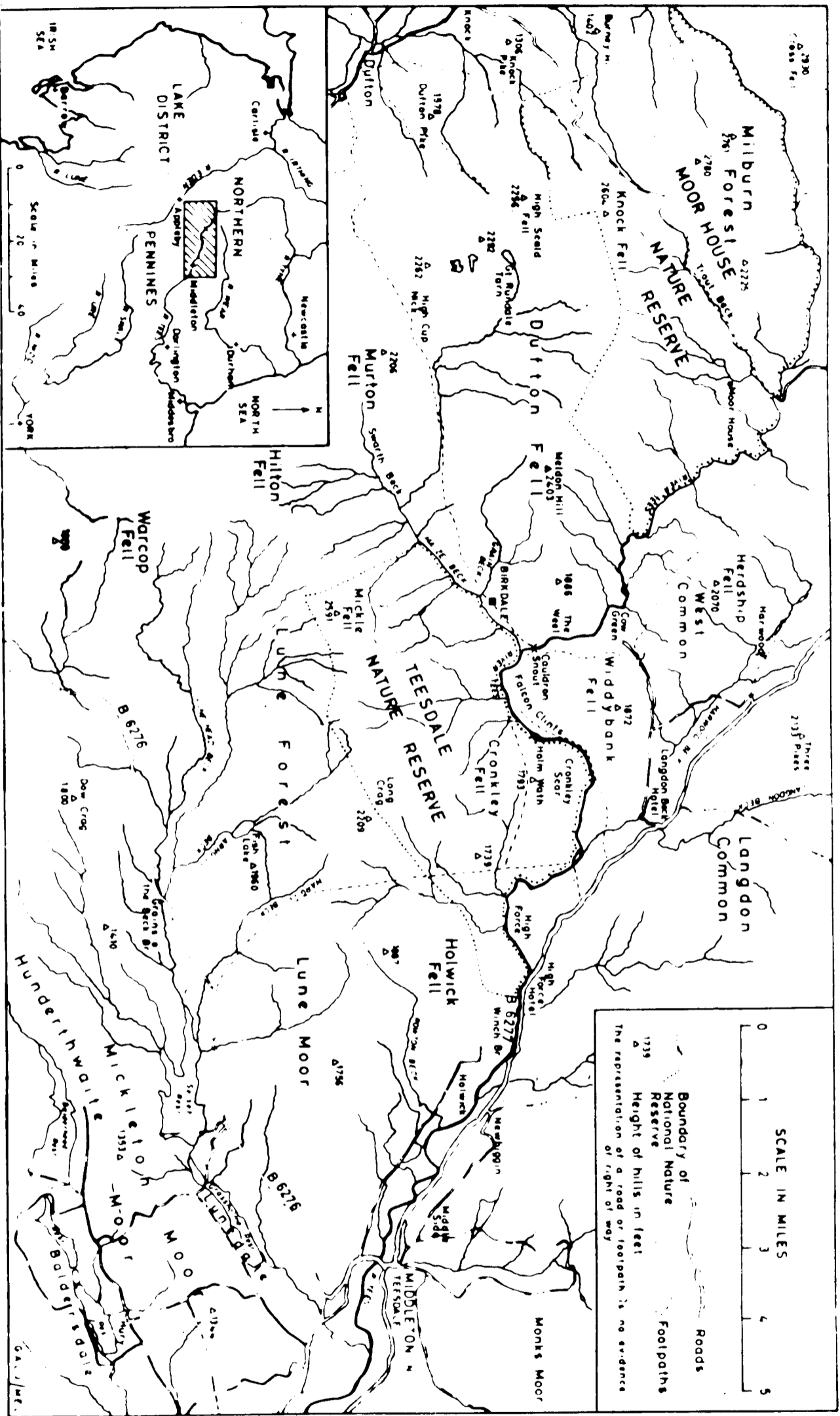
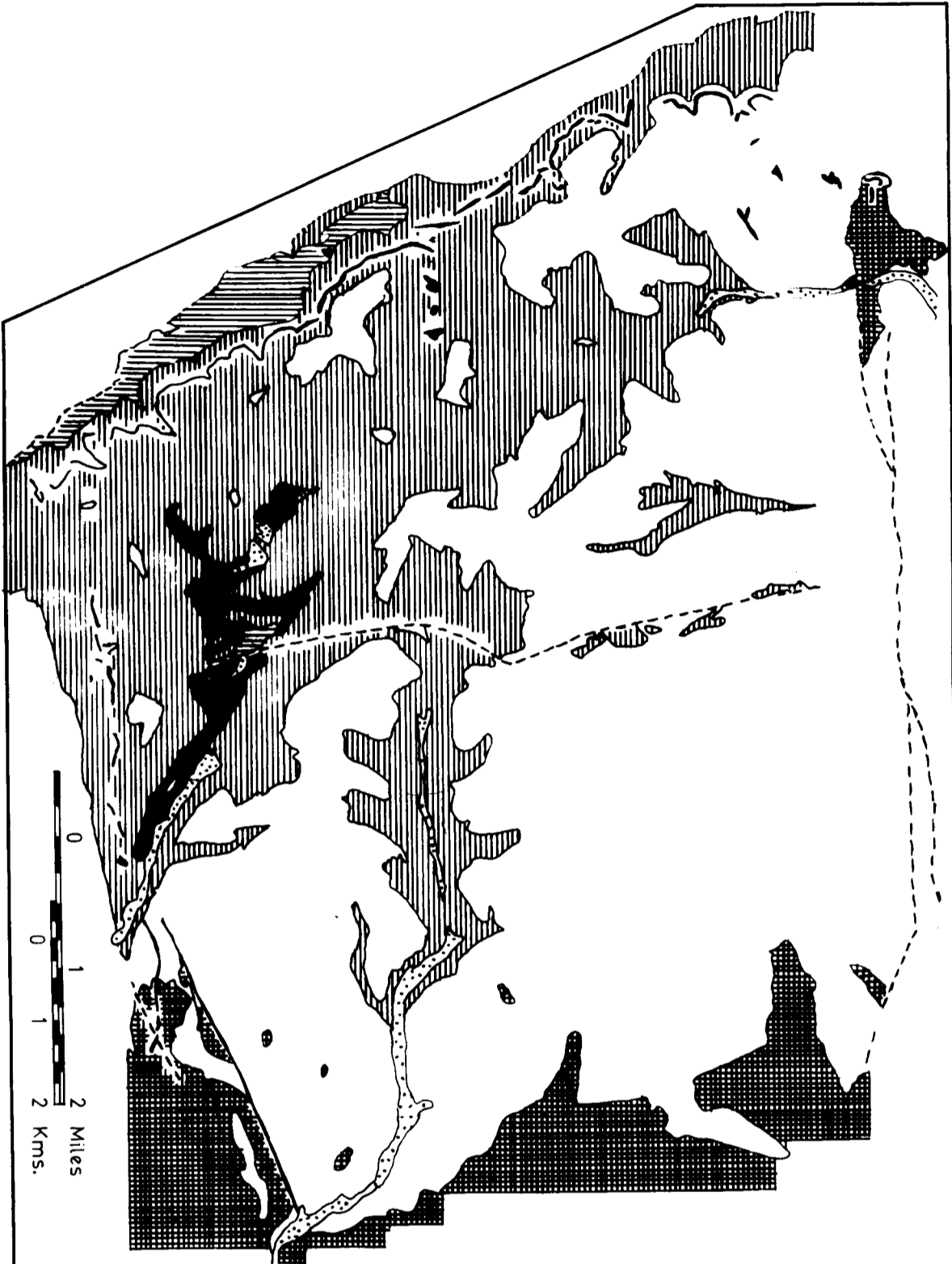


FIG. 1. Sketch map of Upper Teesdale showing the position of the National Nature Reserves. The inset map gives the position of Upper Teesdale in Northern England.

ALSTON BLOCK - GEOLOGY



	ALLUVIUM
	WESTPHALIAN
	NAMURIAN
	VISEAN
	PRE-CARBONIFEROUS
	INTRUSION
	FAULTS

FIG. 2.

UPPER TEESDALE - GEOLOGY

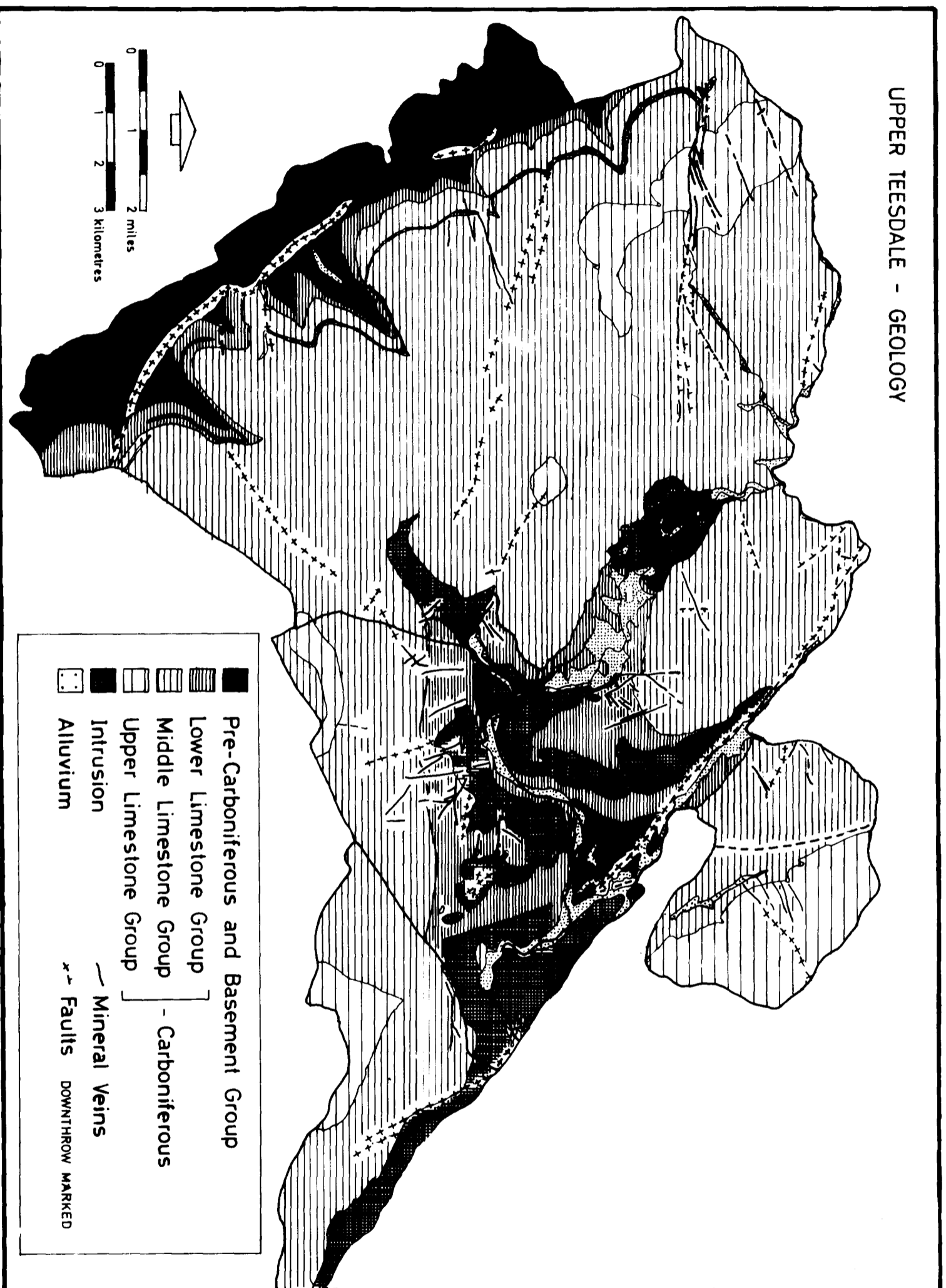
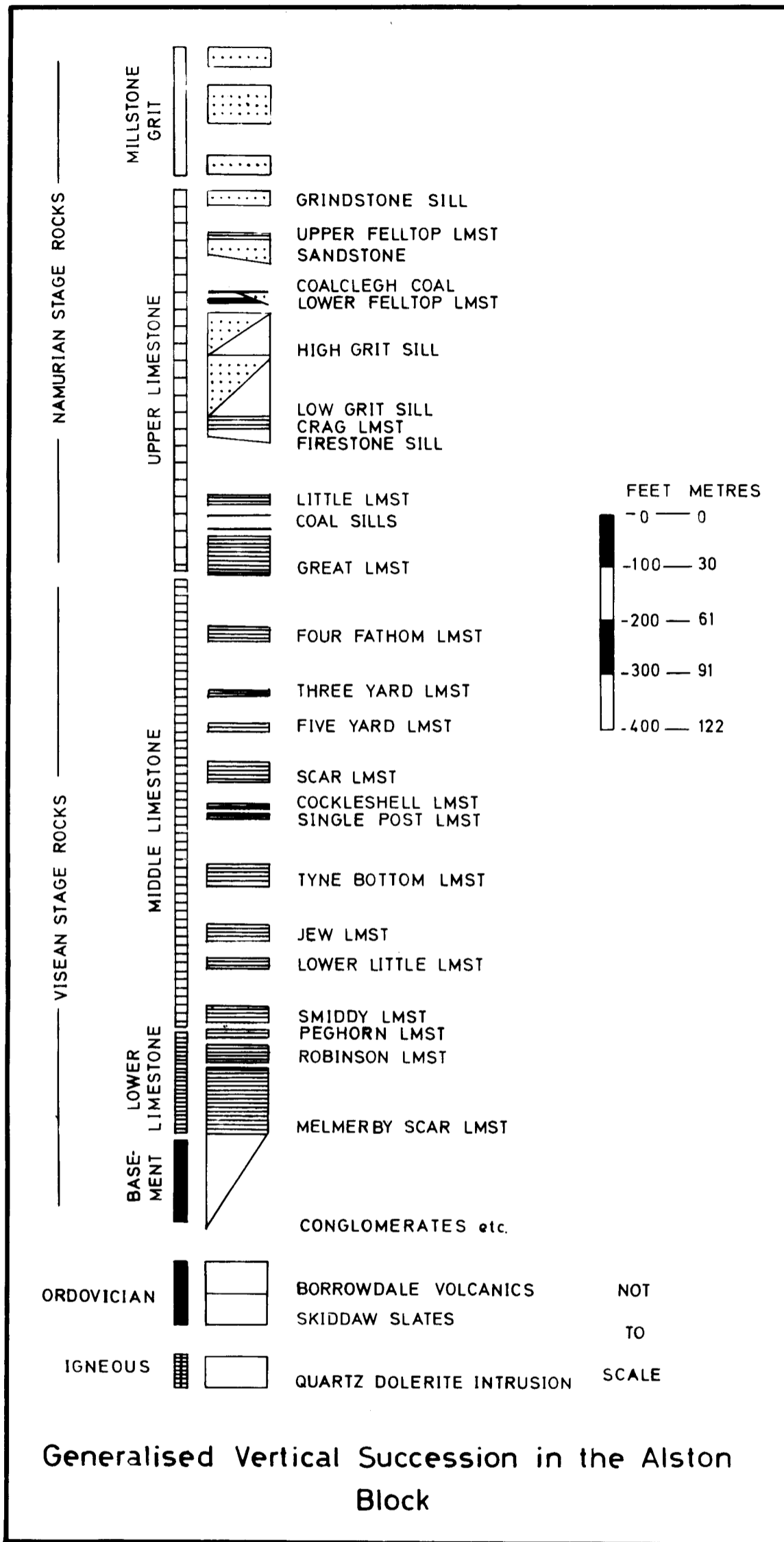


FIG. 3.

FIG. 4.



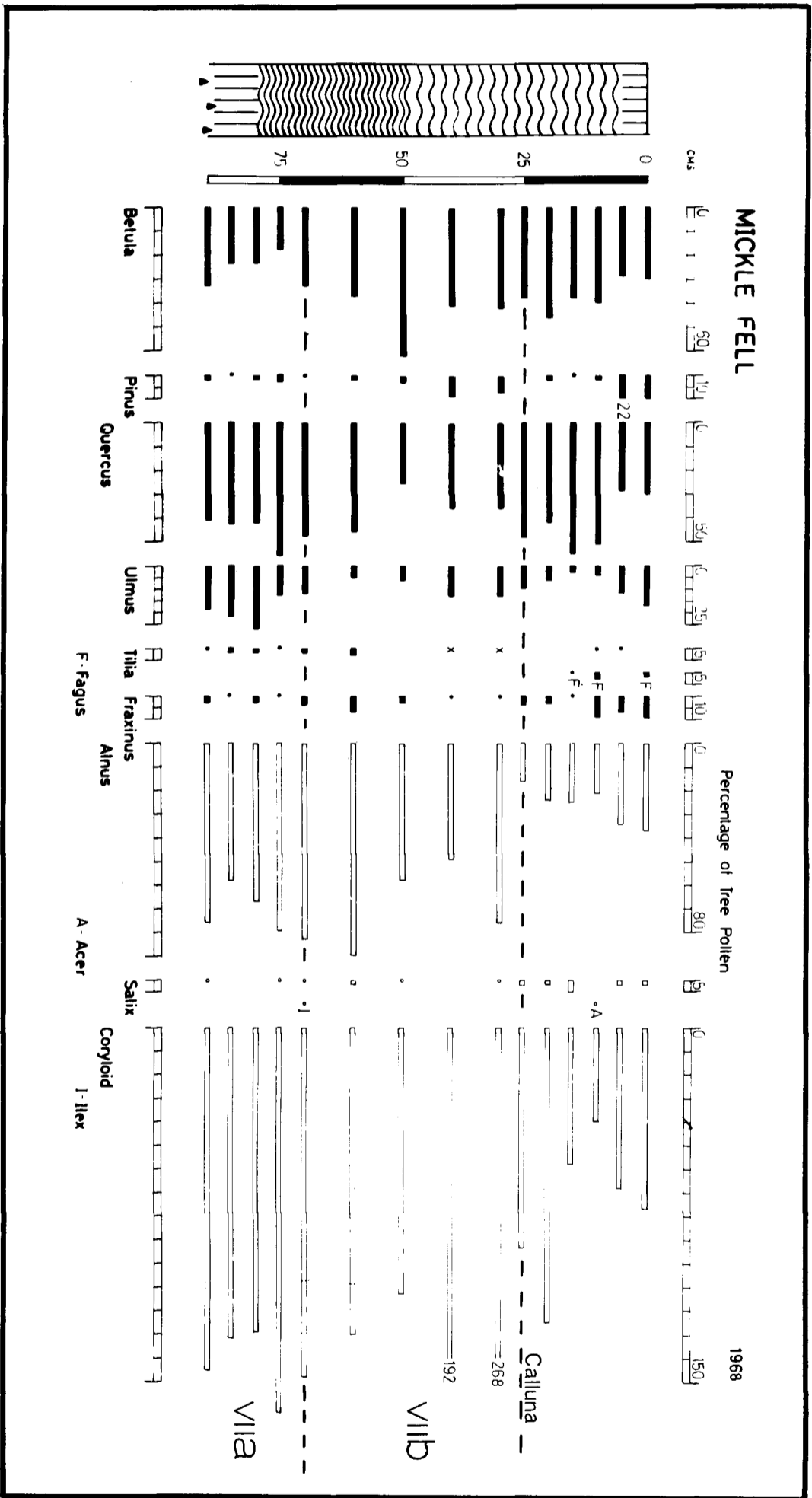


FIG. 50.

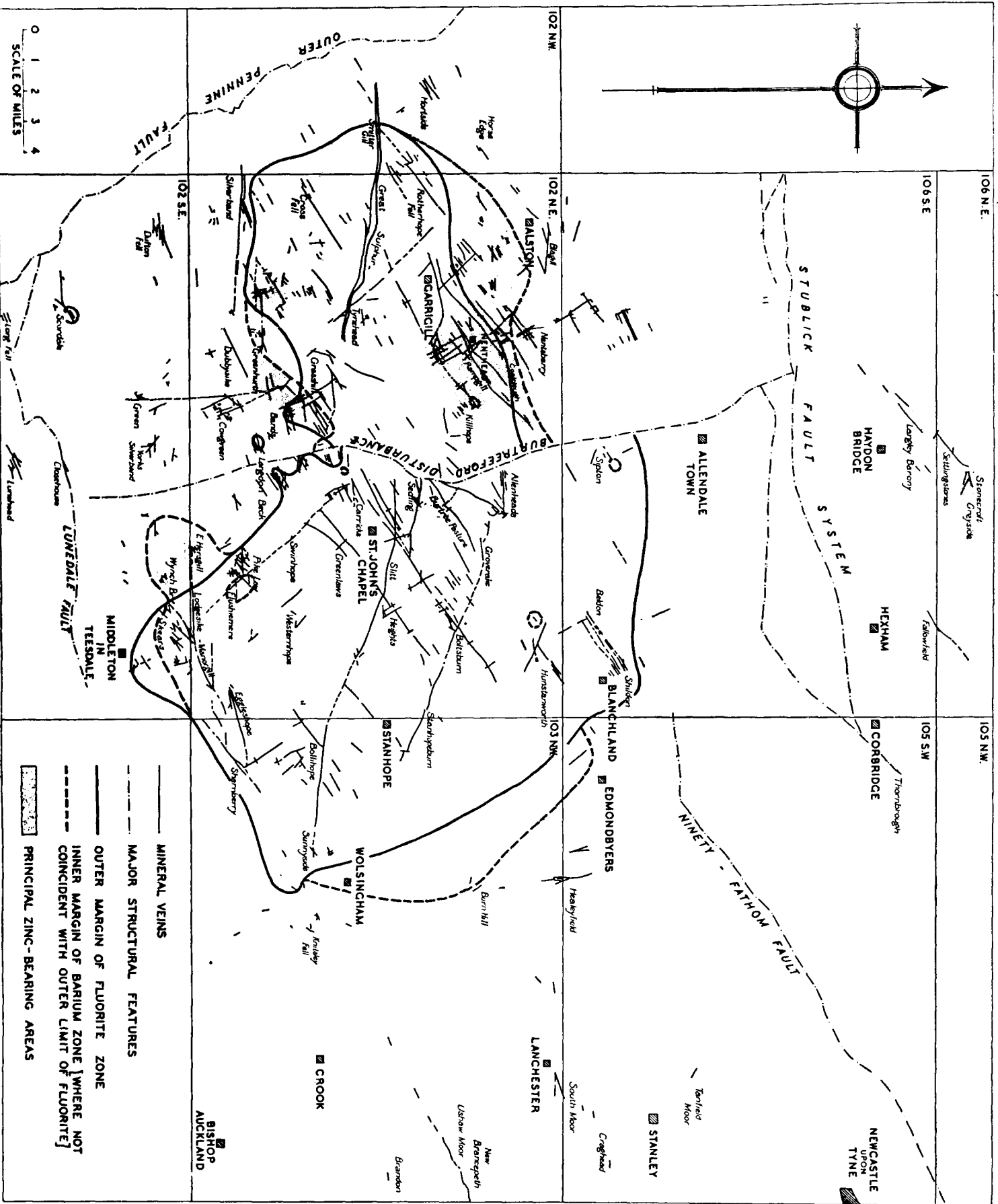


FIG. 5. MAP TO ILLUSTRATE THE DISTRIBUTION OF MINERALS

Northern Pennine Orefield (Mem. Geol. Surv.)

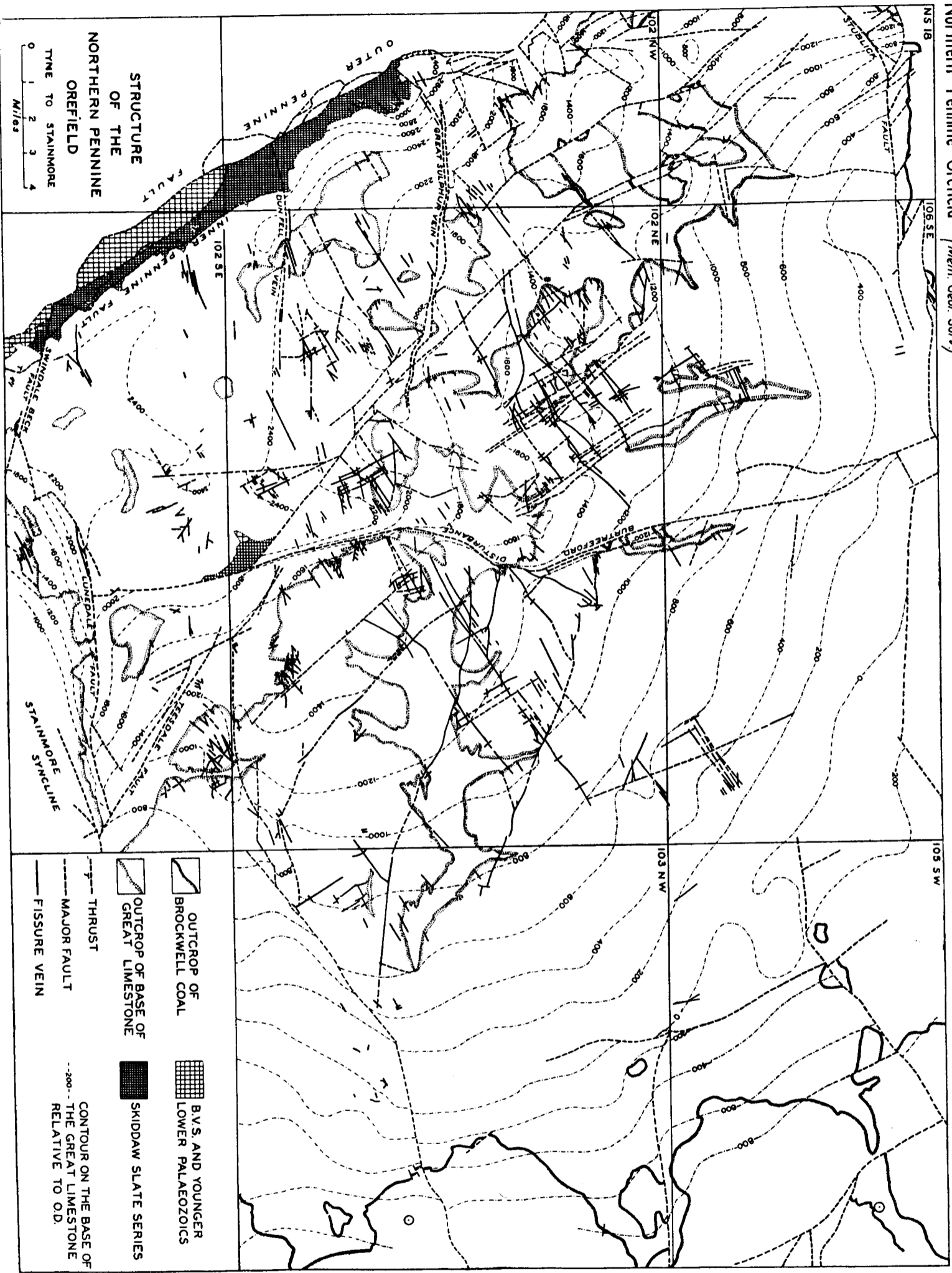
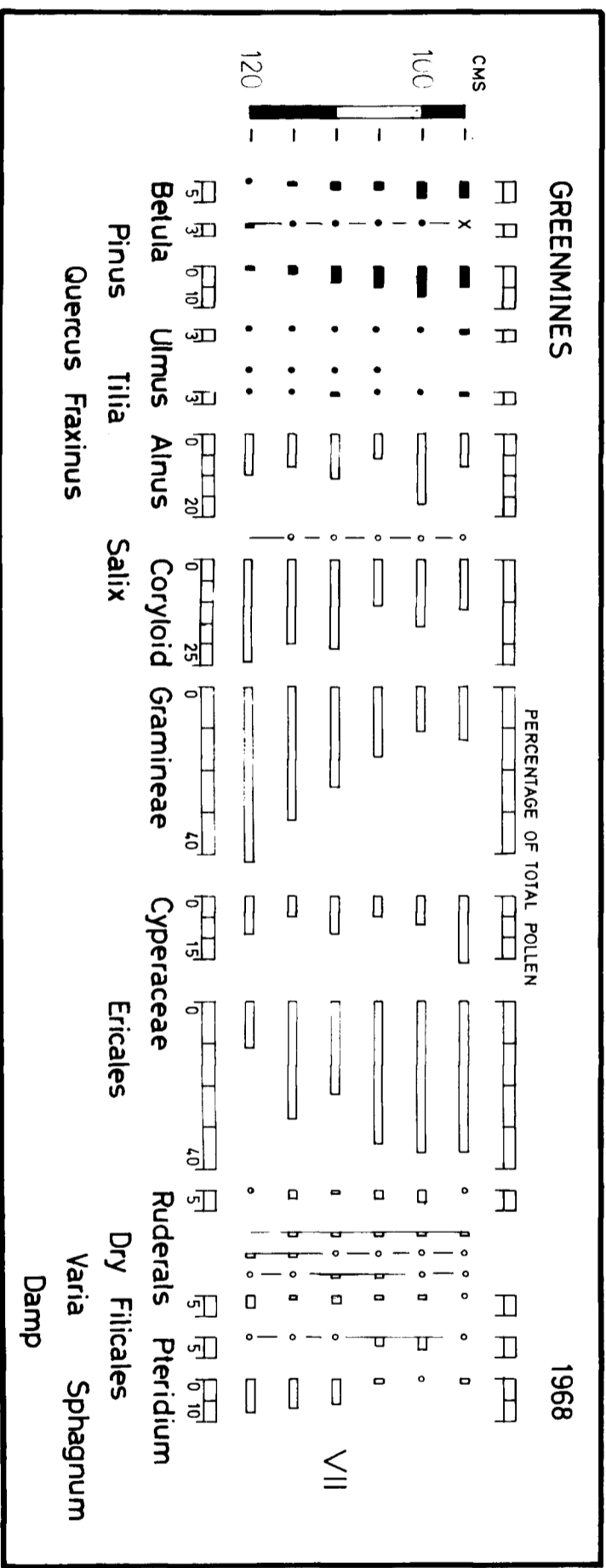
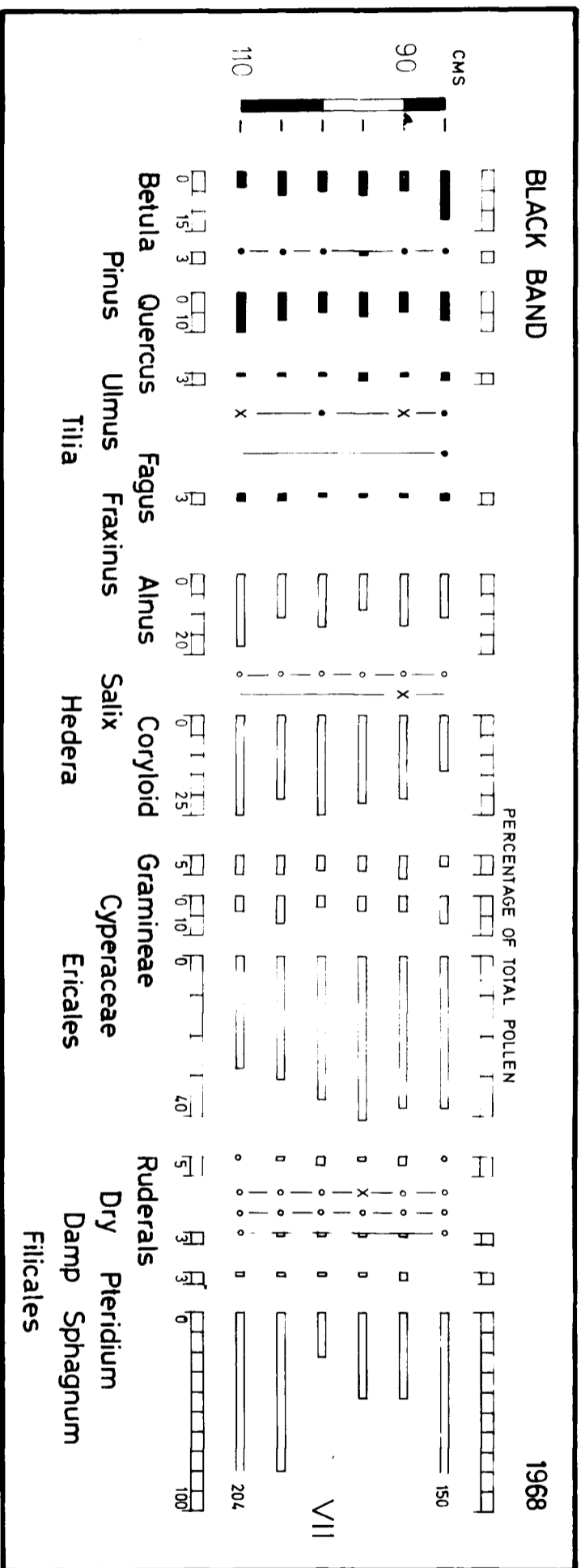


FIG. 6.



UPPER TEESDALE - RELIEF

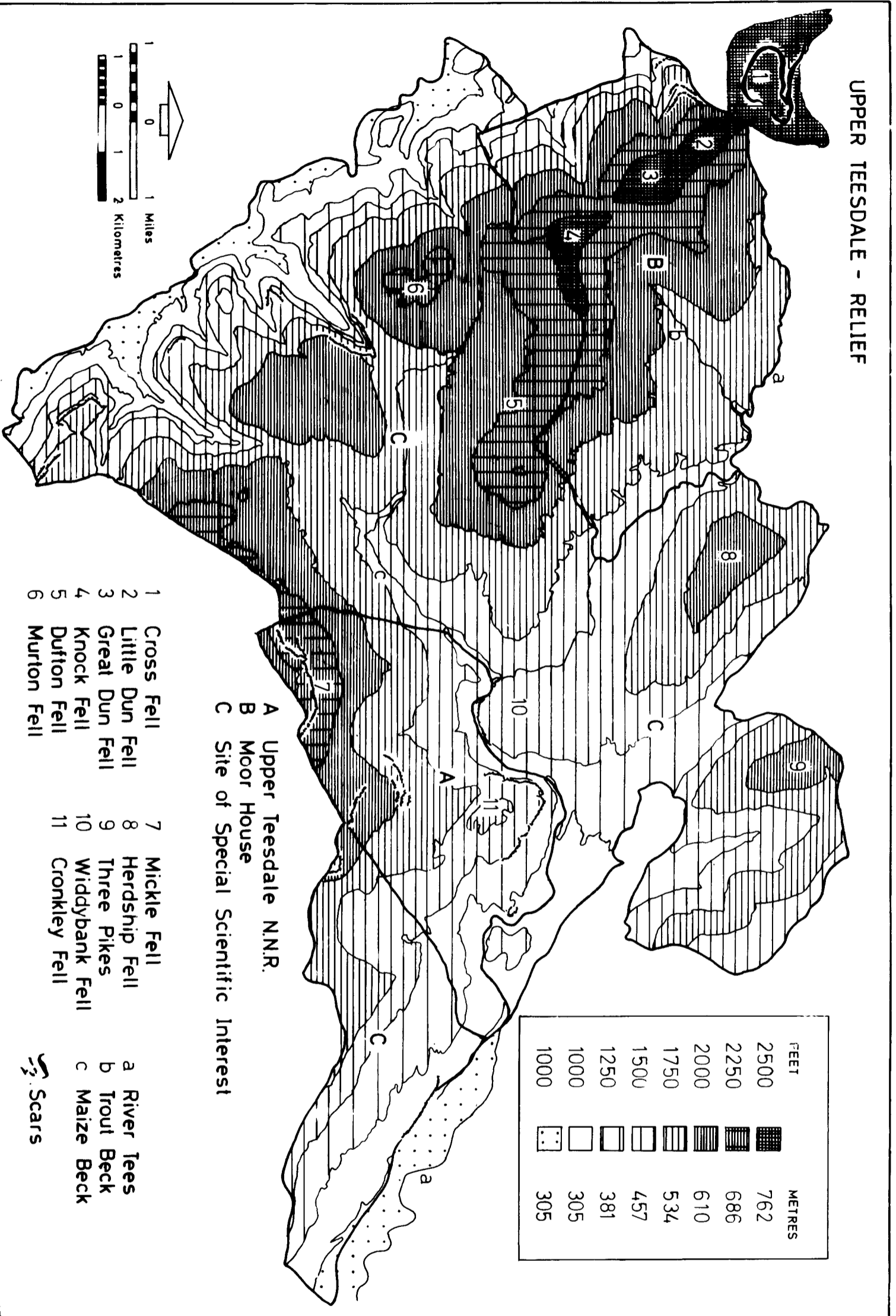


FIG. 7.

COMPARATIVE SUMMIT HEIGHTS (AFTER WRIGHT 1955)

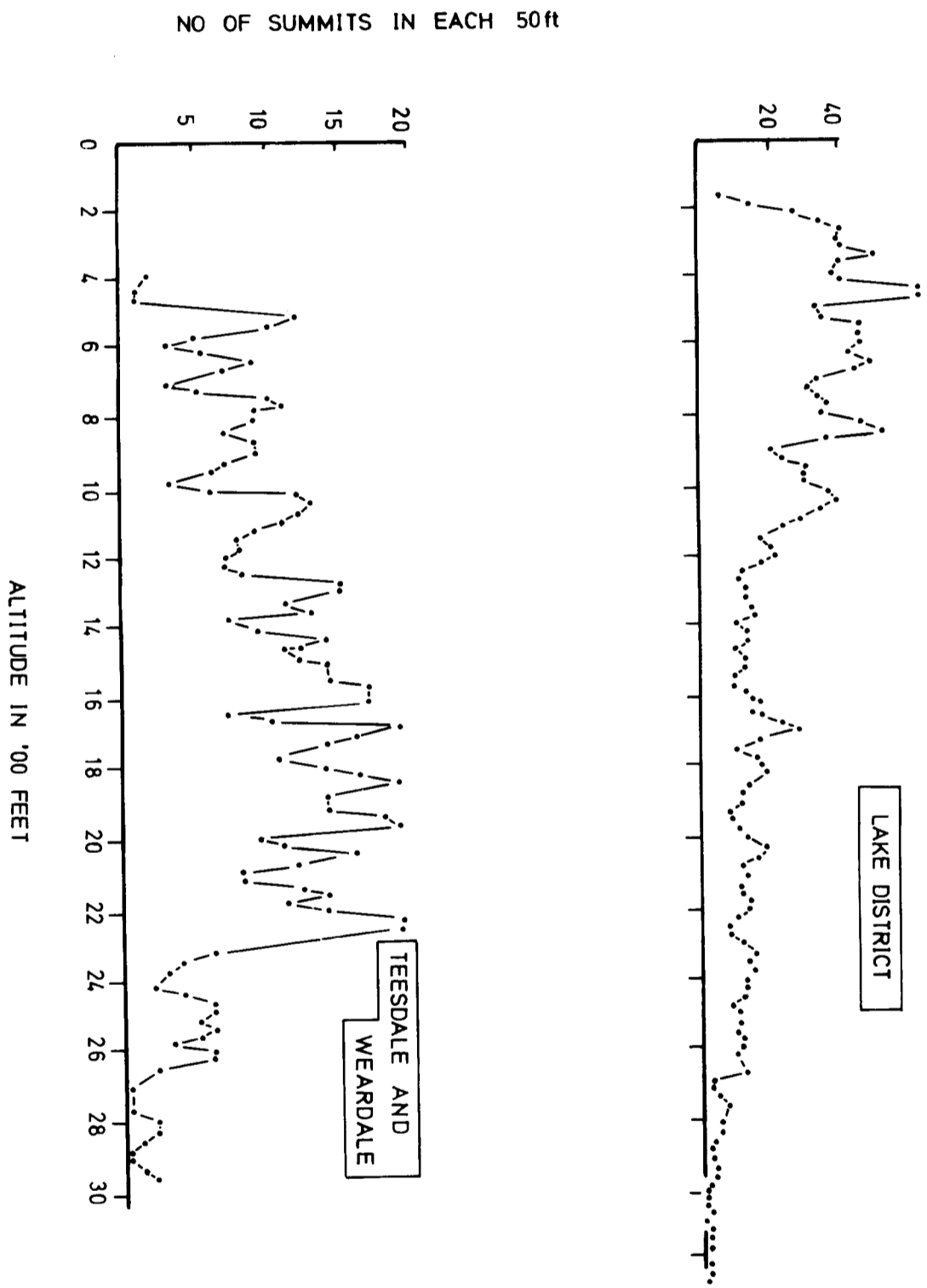


FIG. 8.

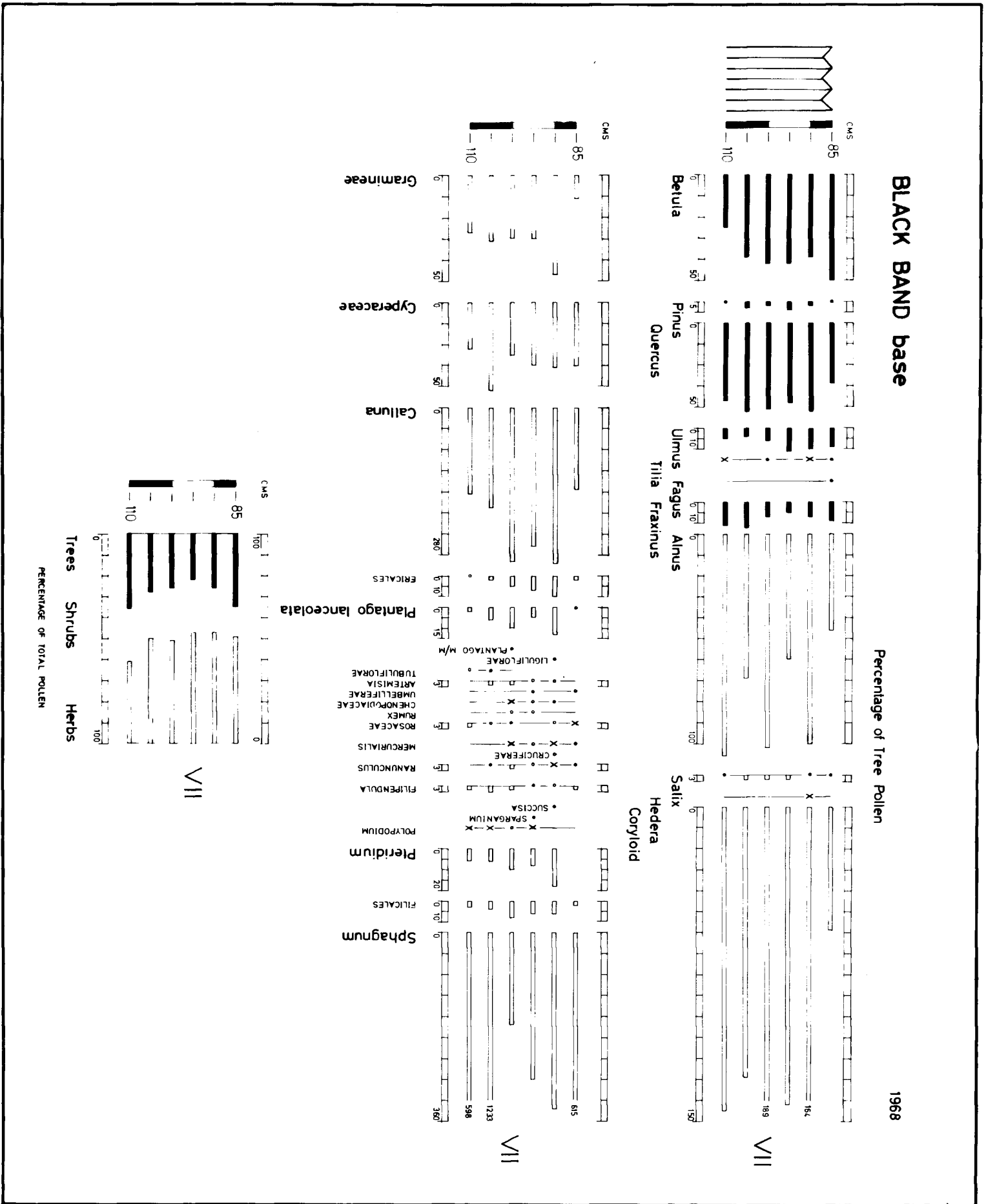


FIG. 48. Plantago lanceolata, P. major/media type, Compositae, Artemisia, Umbelliferae, Chenopodiaceae and Rumex are grouped as ruderals in data sheet 12.

UPPER TEESDALE - SPECIFIC RELIEF (AFTER WRIGHT 1955)

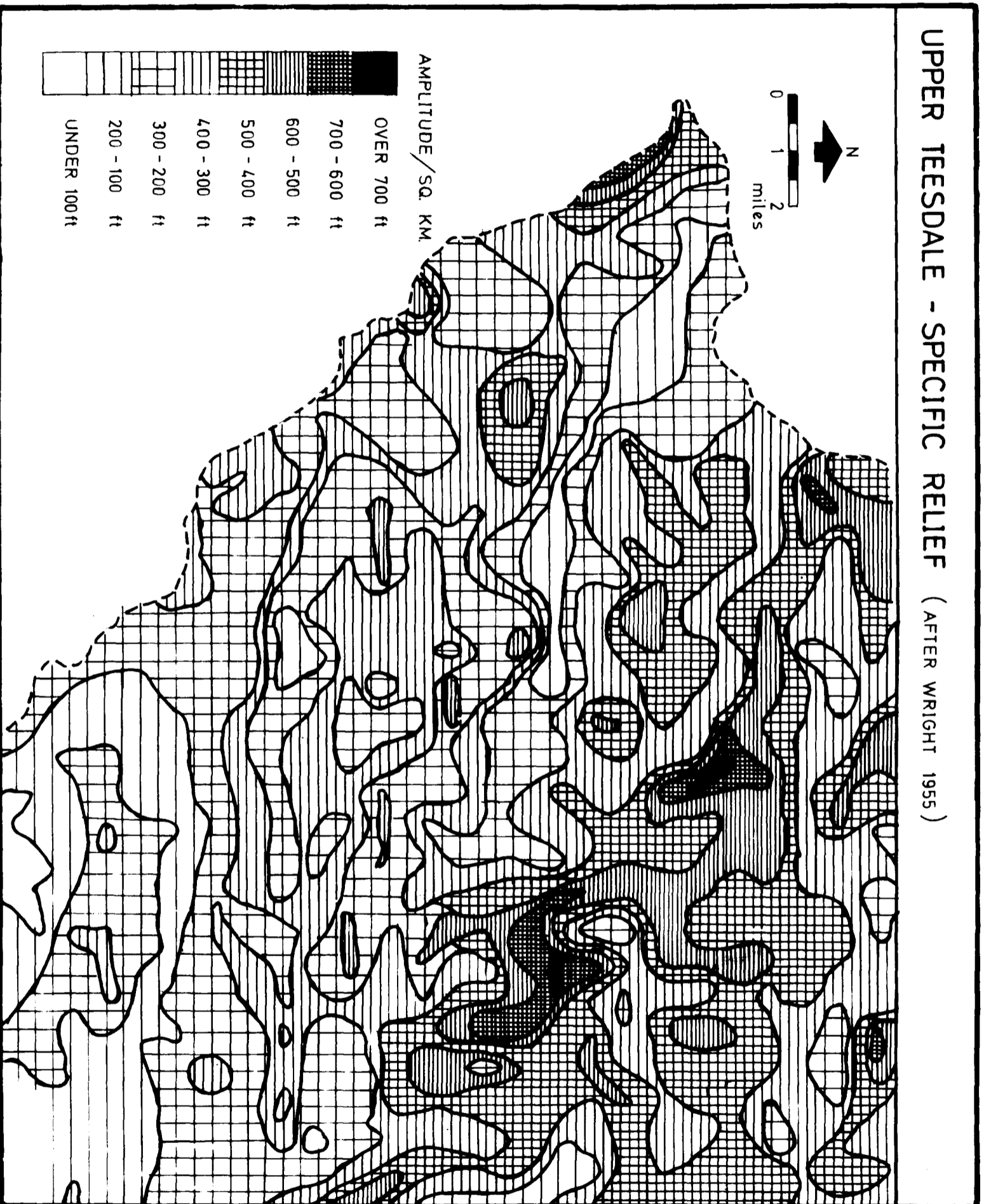


FIG. 9.

UPPER TEESDALE - GENERALISED CONTOURS (AFTER WRIGHT 1955)

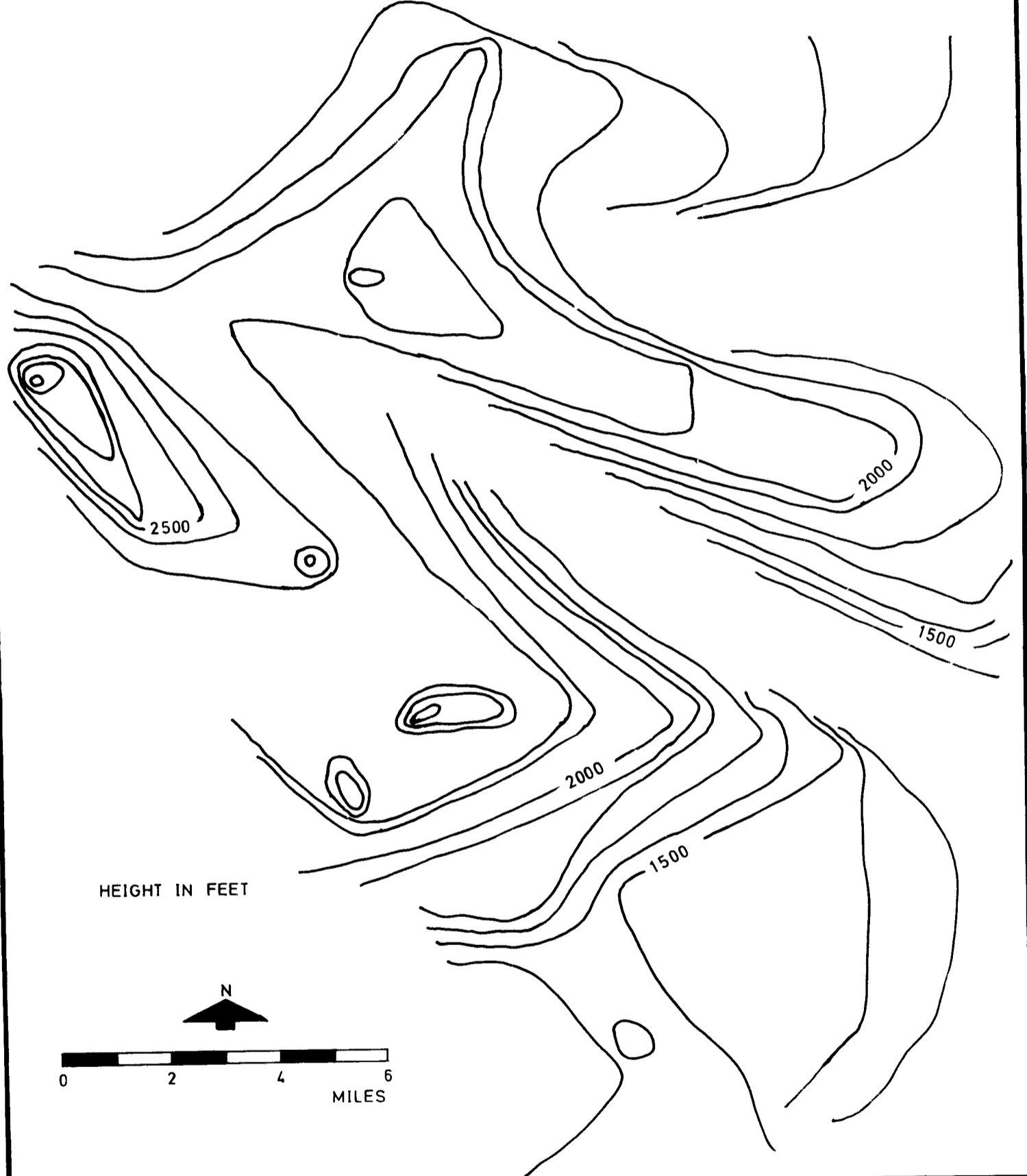
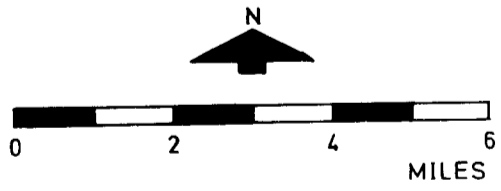


FIG. 10.

HEIGHT IN FEET



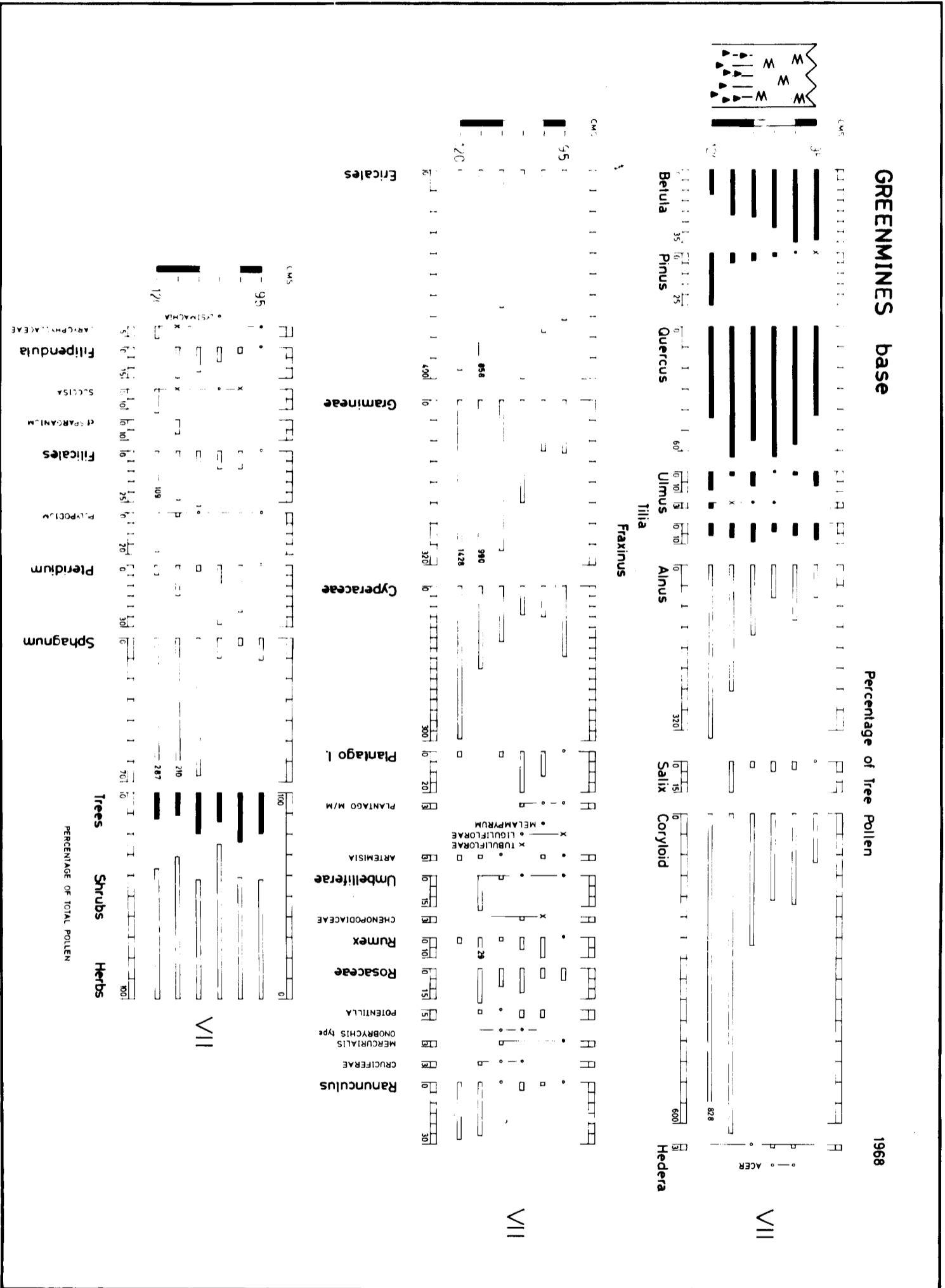


FIG. 47. *Plantago lanceolata*, *P. major/media* type, *Melampyrum*, *Compositae*, *Artemisia*, *Umbelliferae*, *Chenopodiaceae* and *Rumex* are grouped as ruderals in data sheet 11.

SLOPE PROFILES (AFTER ATKINSON 1968)

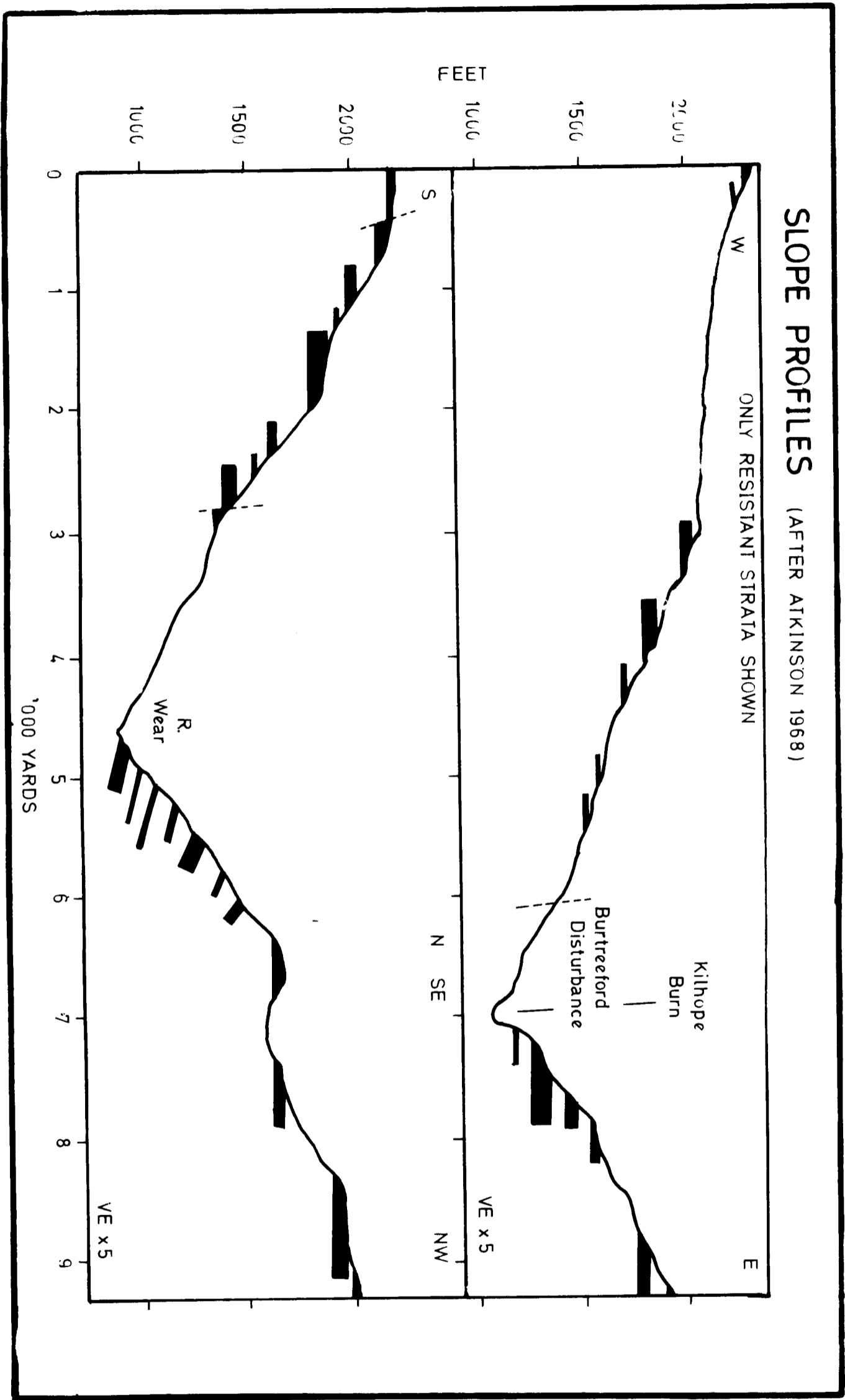


FIG. 11.

ALSTON BLOCK - DRAINAGE

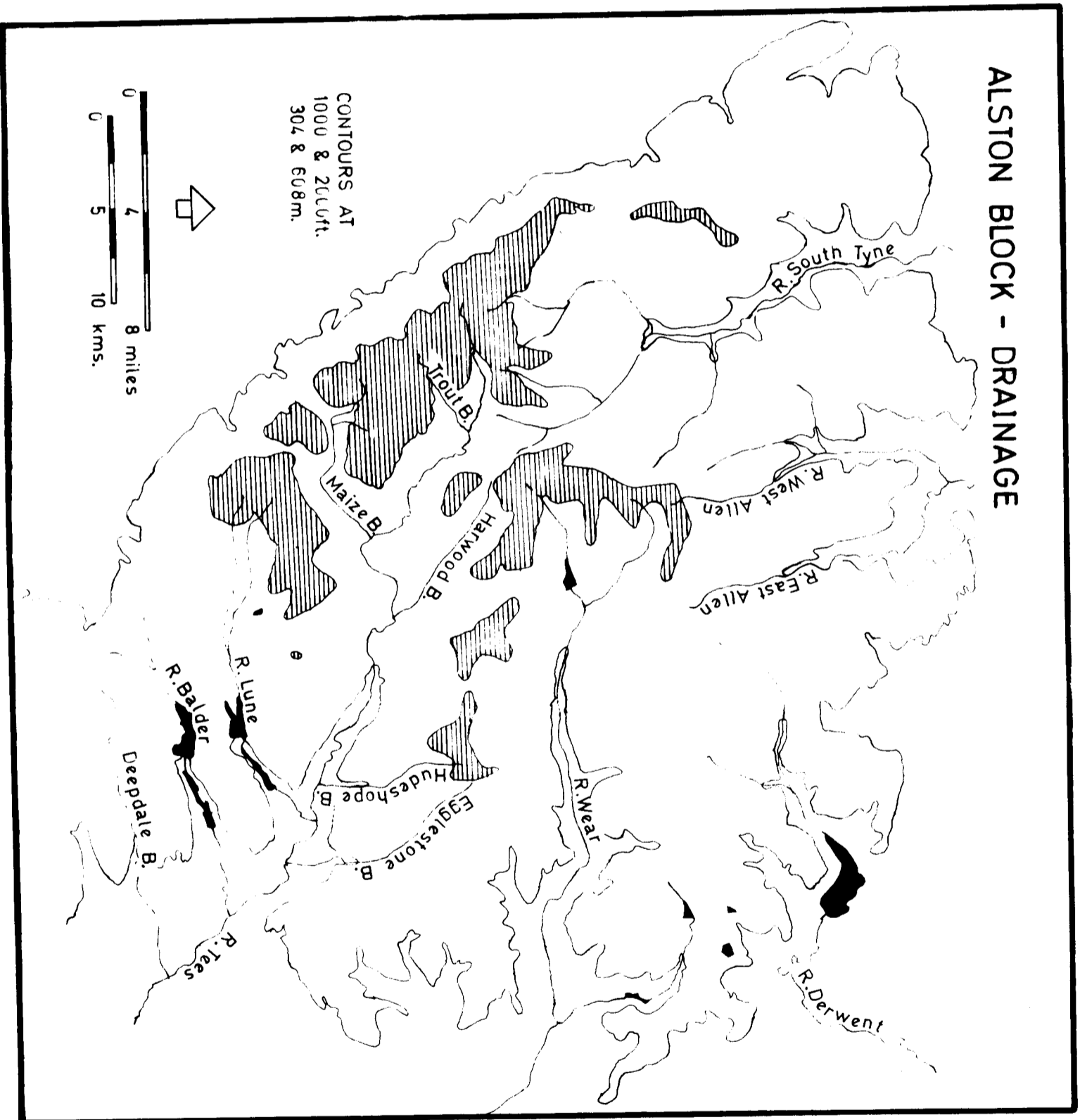


FIG. 12.

FIG. 46A. Ruderals: *Plantago lanceolata*, *P. major/medica* type, *Melampyrum*, *Compositae*, *Umbelliferae* and *Rumex*.

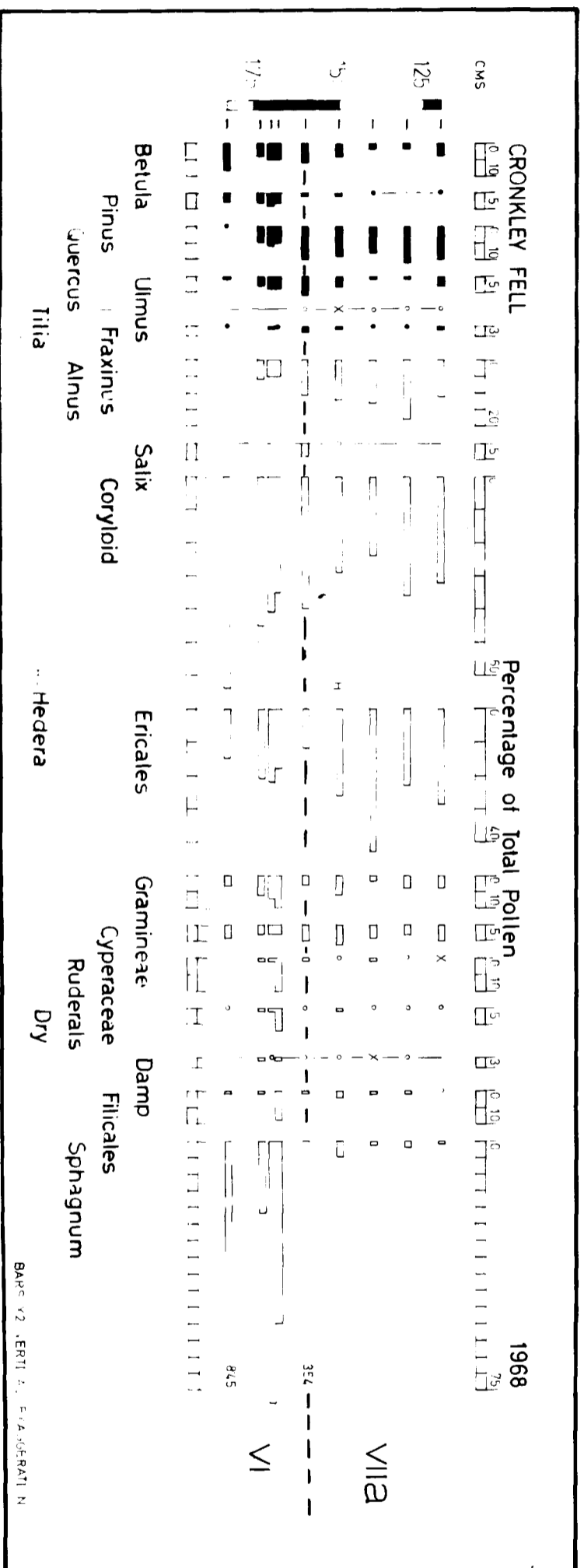
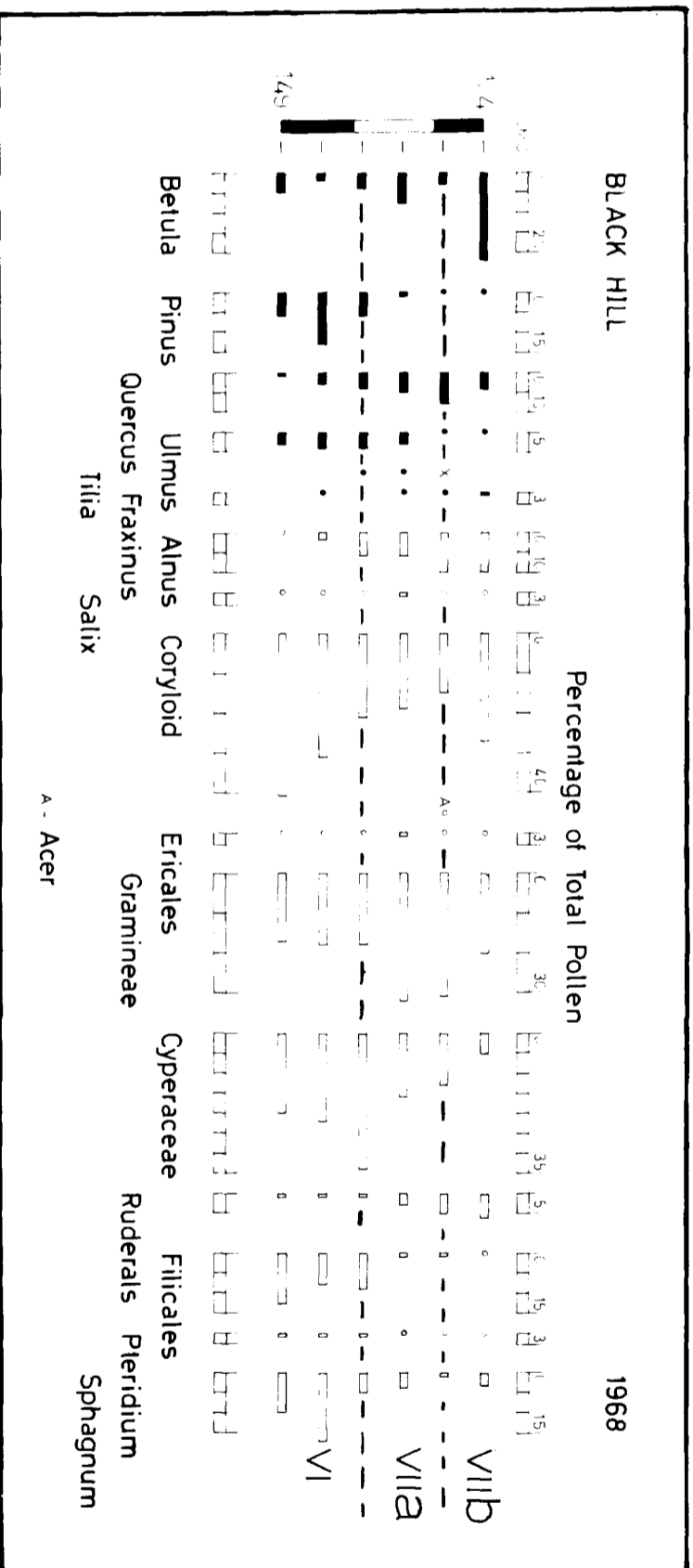


FIG. 46B. Ruderals: *Plantago lanceolata*, *Spergula*, *Melampyrum*, *Compositae*, *Artemisia*, *Umbelliferae* and *Rumex*.
 Dry: *Rosaceae*, *Potentilla* type, *Vicia* type, *Rubiaceae* and *Campanula*.
 Damp: *Filipendula* and *Succisa*.

BASE x2, ERTI 5, FLASERRATI N

GLACIATION OF NORTHUMBERLAND AND DURHAM

AT GLACIAL MAXIMUM

- T—T S Limit of Tweed Erratics
- S—S N Limit of Griffl Erratics
- C—C W Limit of Cheviot Erratics
- L—L Limit of Lake District Erratics

miles
2 0 2 4 6 8 10

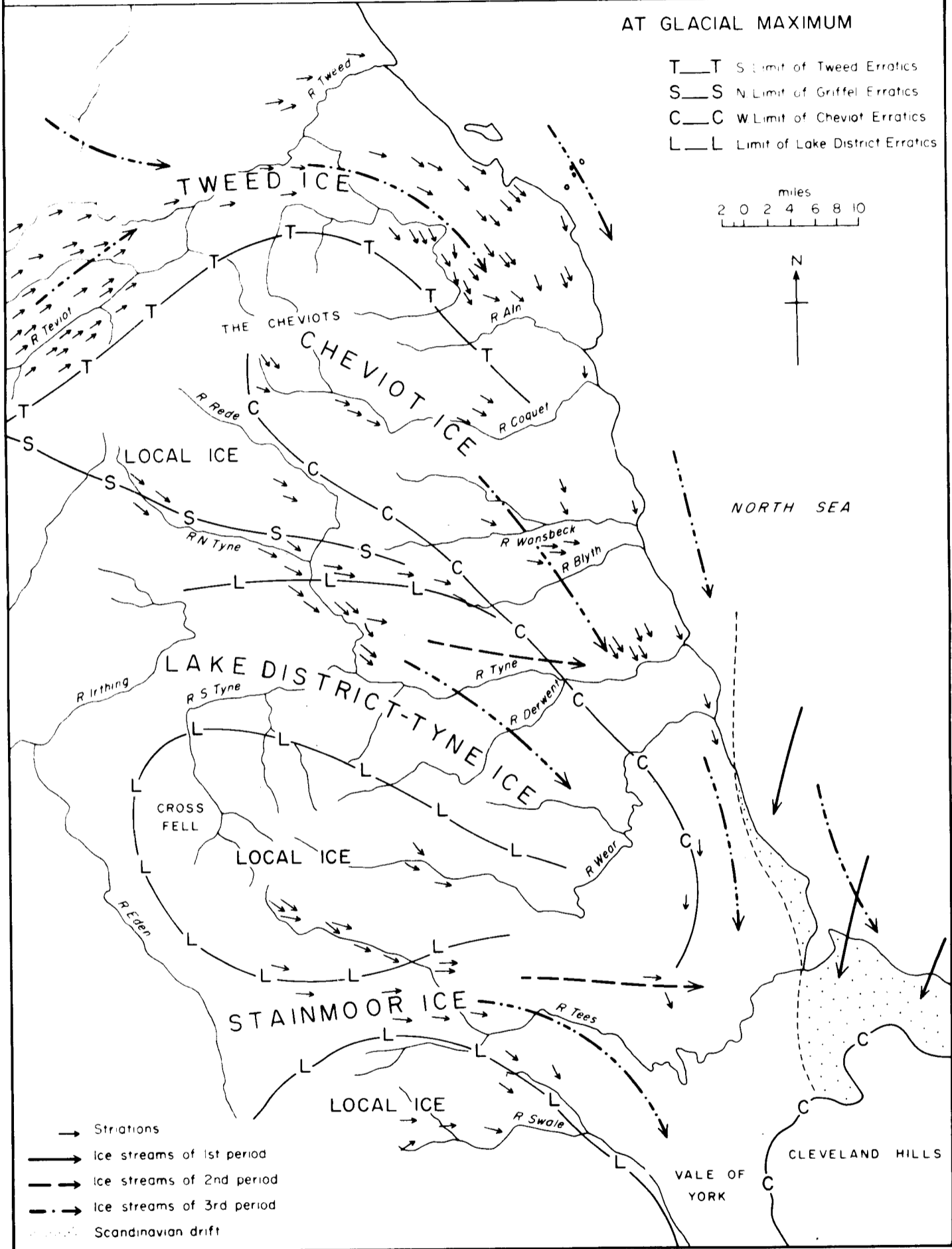
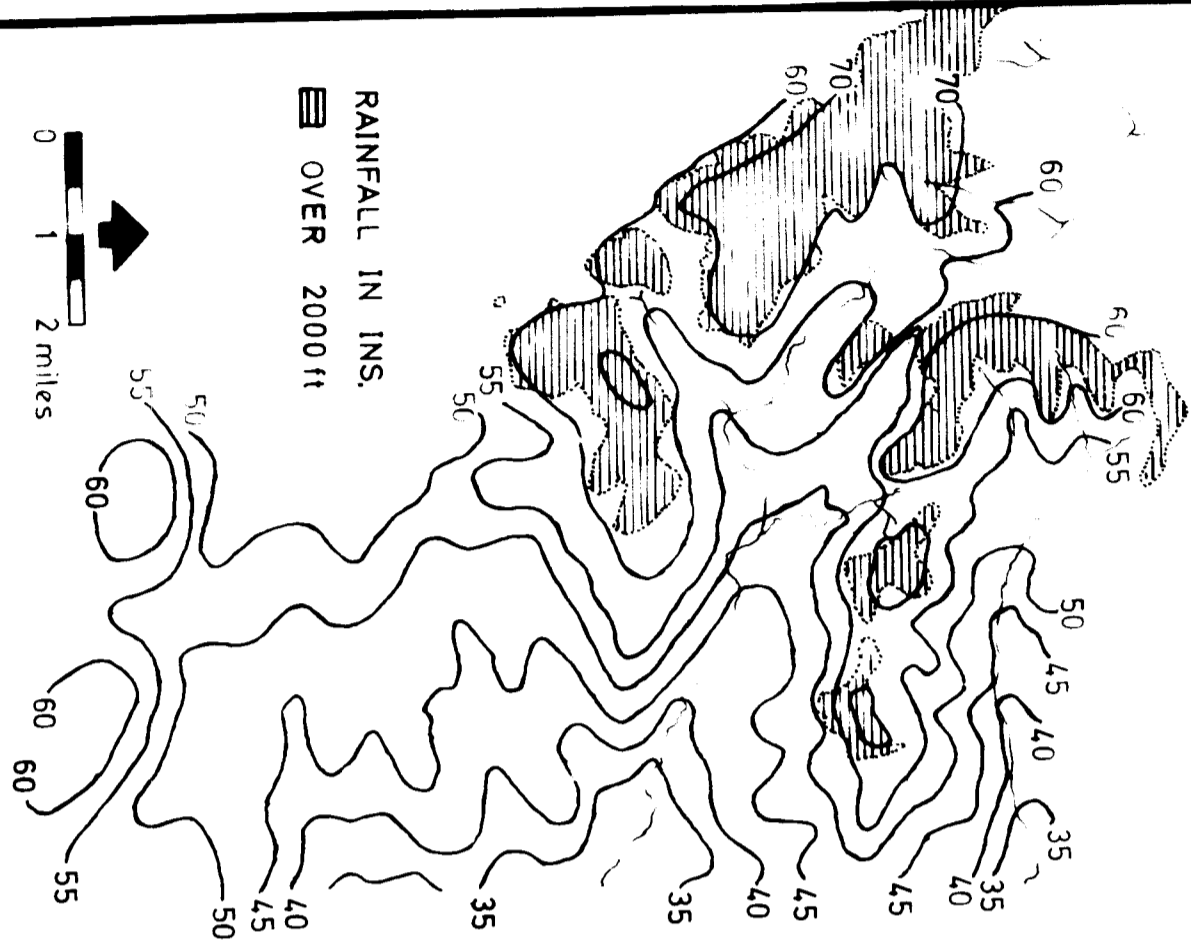


FIG. 13.

Upper Teesdale - Rainfall



- 1 ALSTON
- 2 WELHEADS
- 3 BURNHOPE
- 4 GRASSMERES
- 5 LODGEGILL
- 6 BOWES CLOSE
- 7 NEWBIGGIN
- 8 MIDDLETON
- 9 GRASSHOLME
- 10 SELSET
- 11 HARGILL
- 12 LUNEHEAD
- 13 KEEKHAM
- 14 CONNYPOT
- 15 DOW CRAG
- 16 BLACKTON
- 17 HURY
- 18 AYGILL

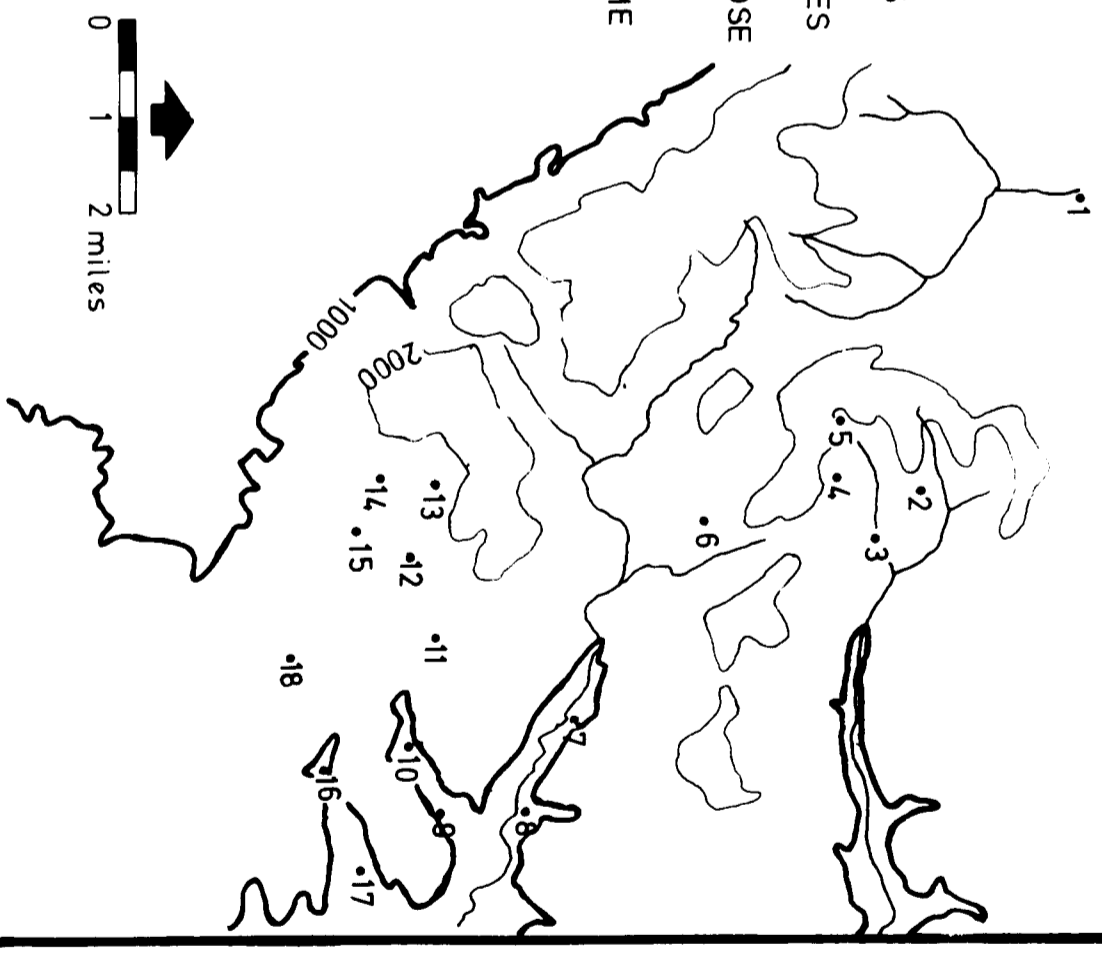


FIG. 14.

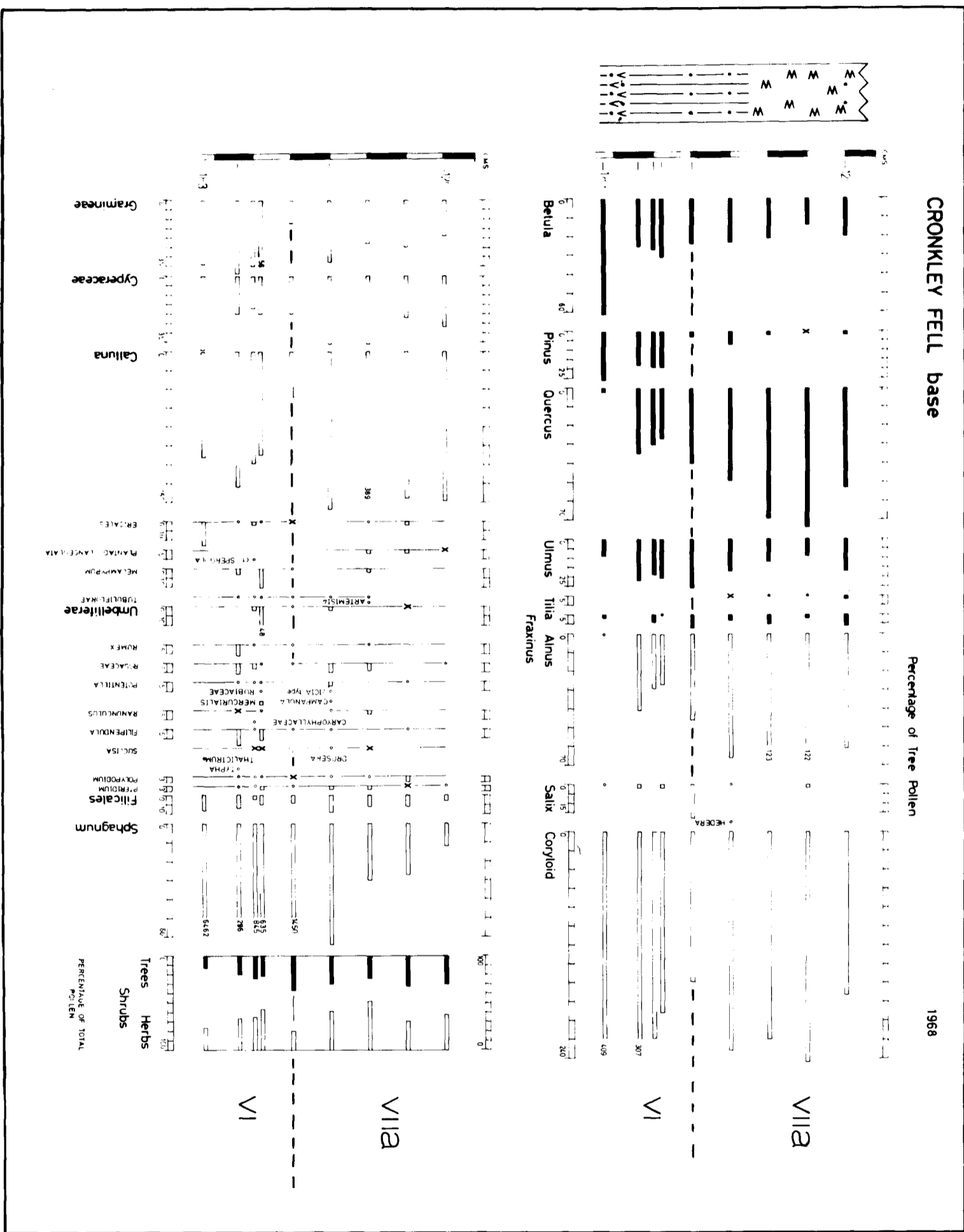


FIG. 45. Plantago lanceolata, Spargula, Melampyrum, Compositae, Artemisia, Umbelliferae and Rumex are grouped as ruderals in data sheet 10.

TEESDALE - MEAN MONTHLY RAINFALL

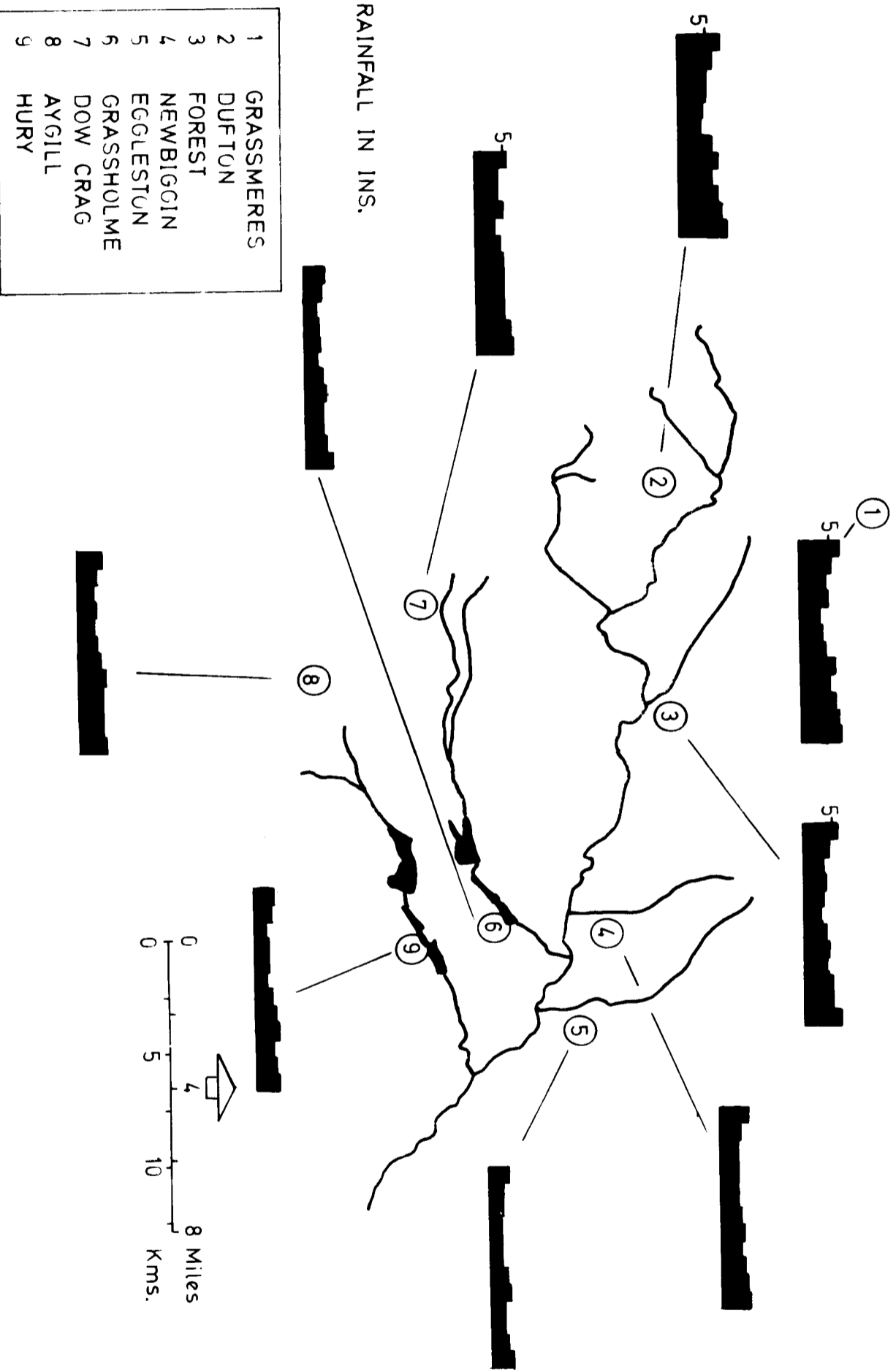
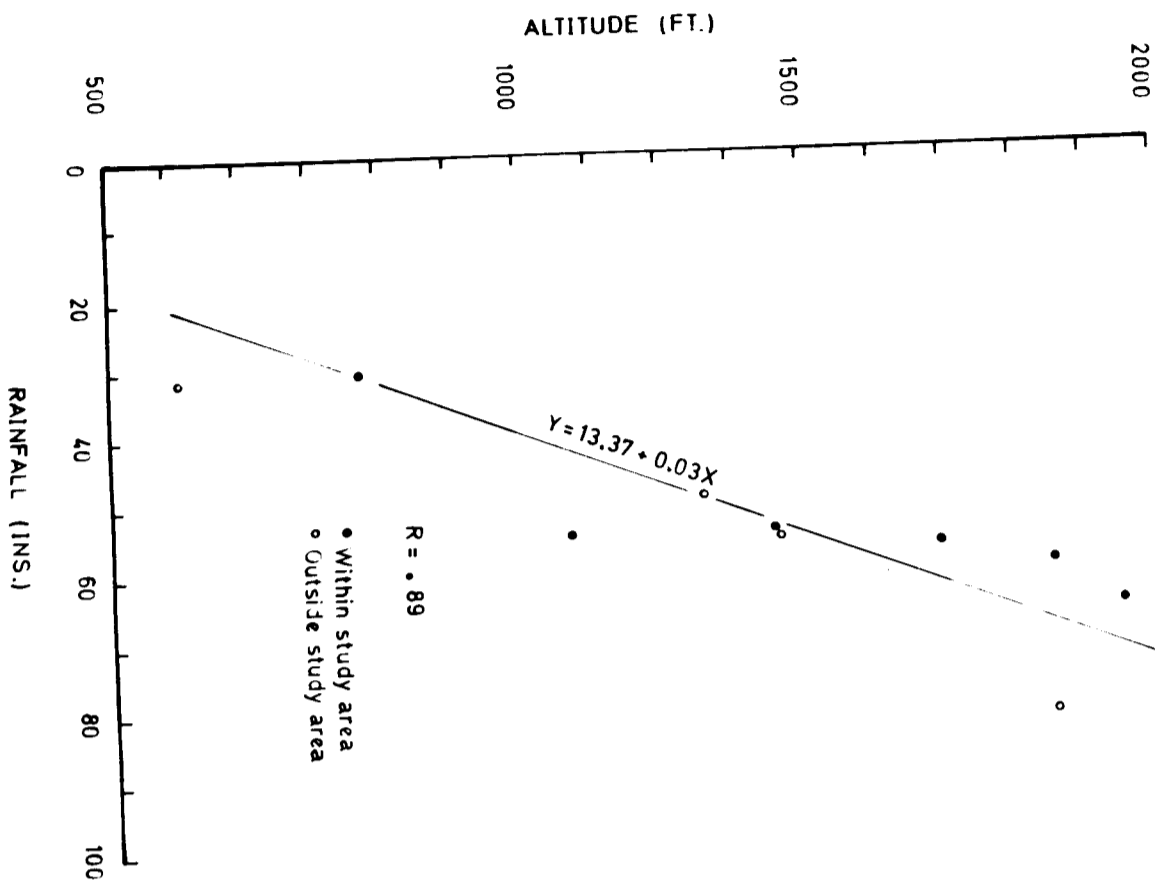


FIG. 15.

ALTITUDE-PRECIPITATION RELATIONSHIPS

Weardale (AFTER ATKINSON 1968)



Teesdale

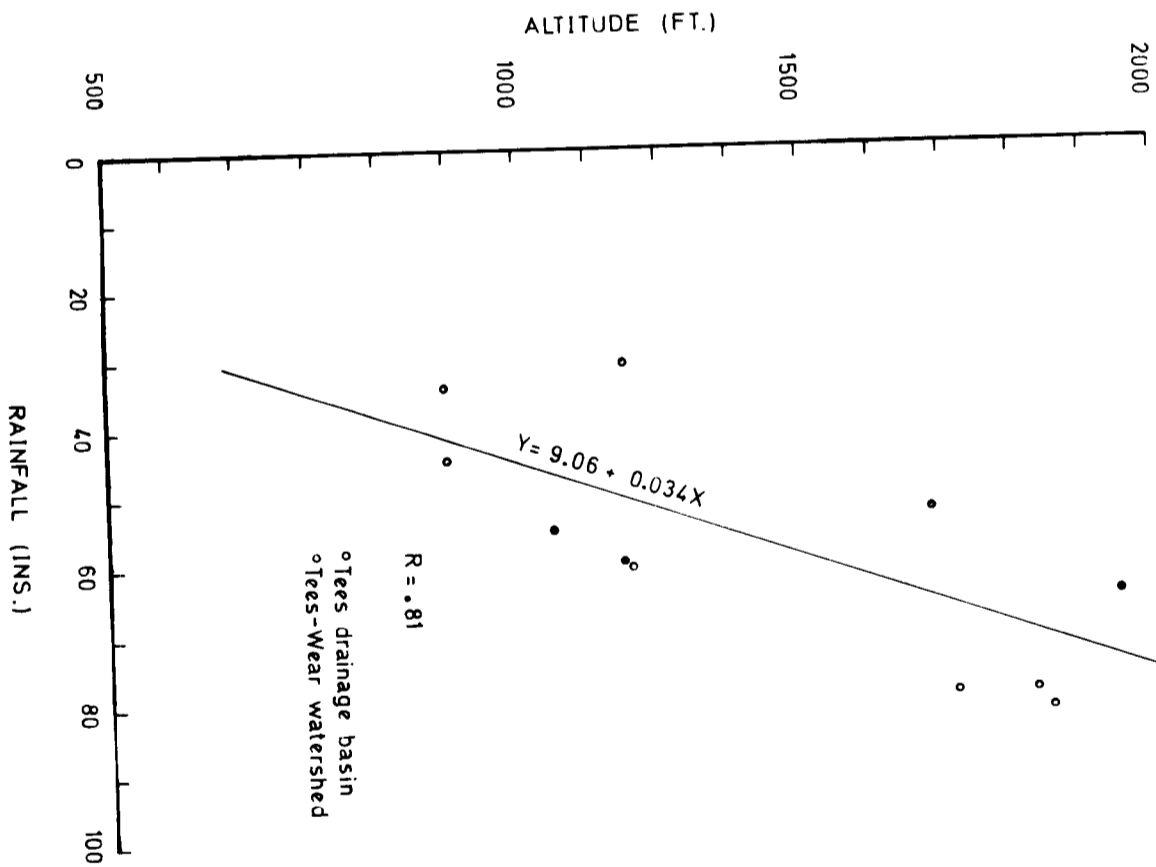


FIG. 16.

BLACK HILL base

Percentage of Tree Pollen

1968

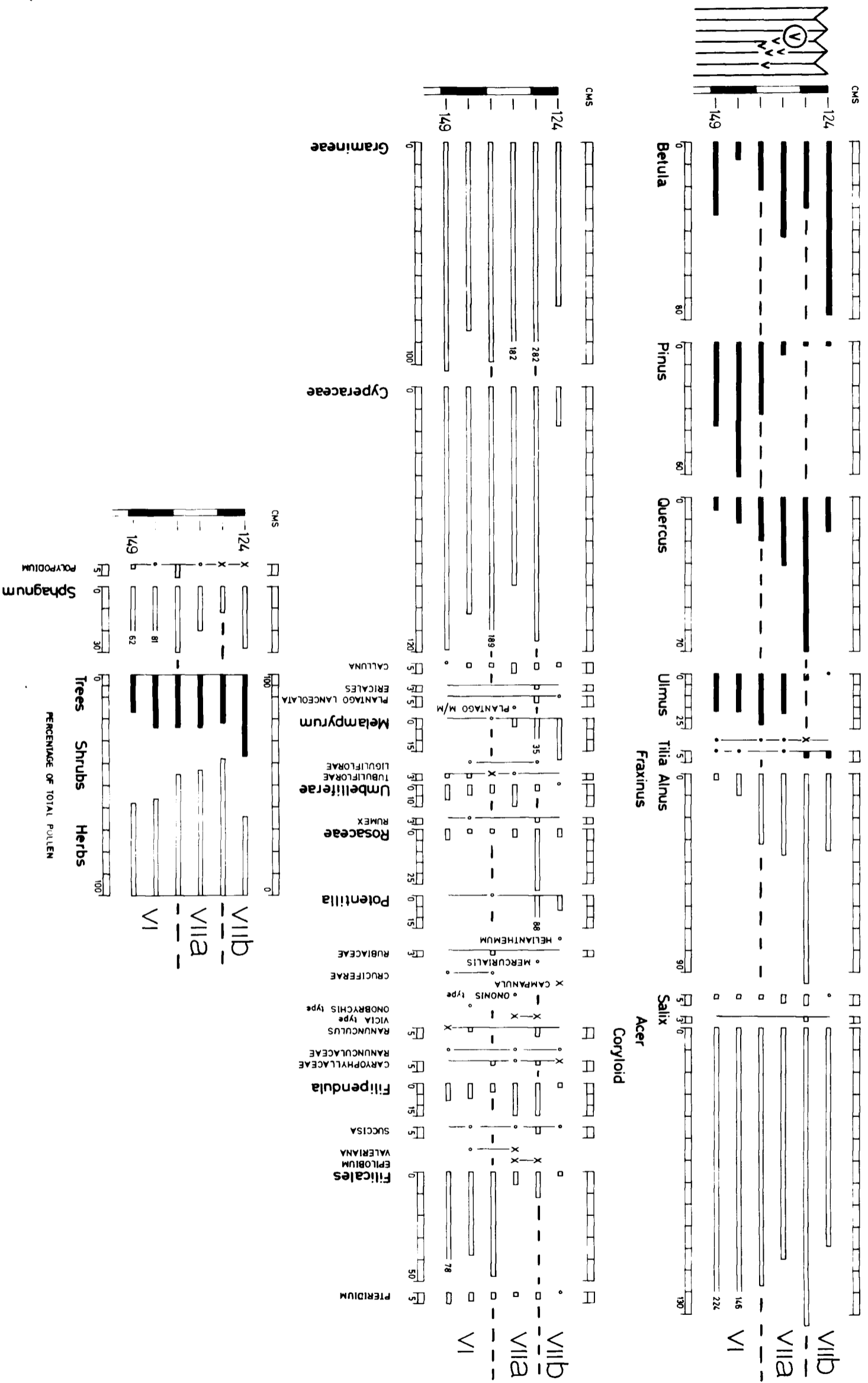
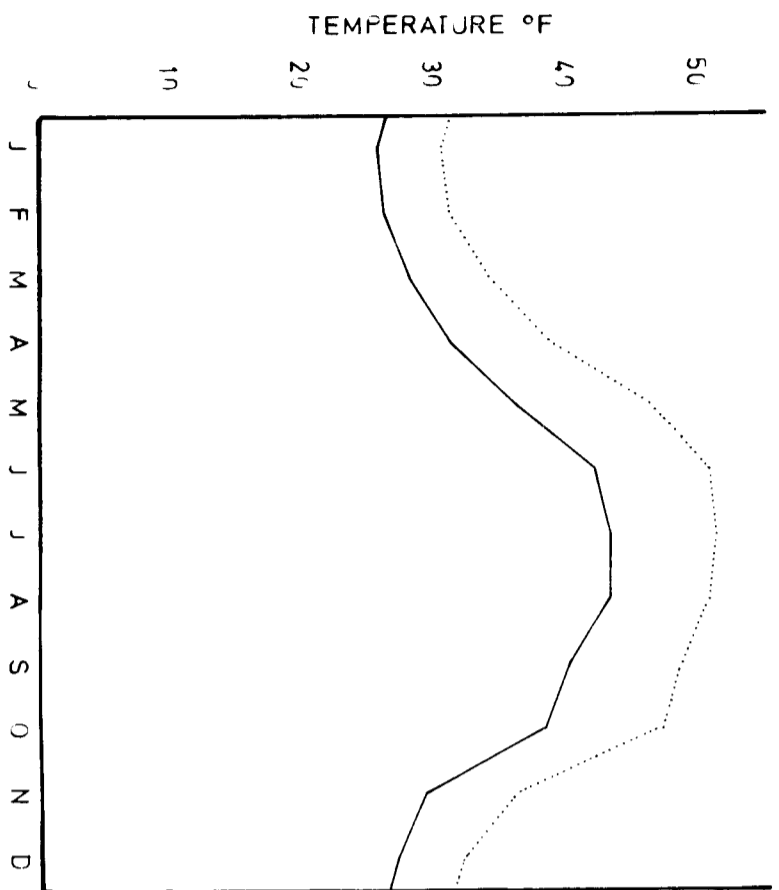


FIG. 44. *Plantago lanceolata*, *P. major/media* type, *Melampyrum*, *Compositae*, *Umbelliferae* and *Rumex* are grouped as ruderals in data sheet 9.

MEAN MONTHLY TEMPERATURES 1962-67
MAXIMUM AND MINIMUM

Dun Fell



Duffton

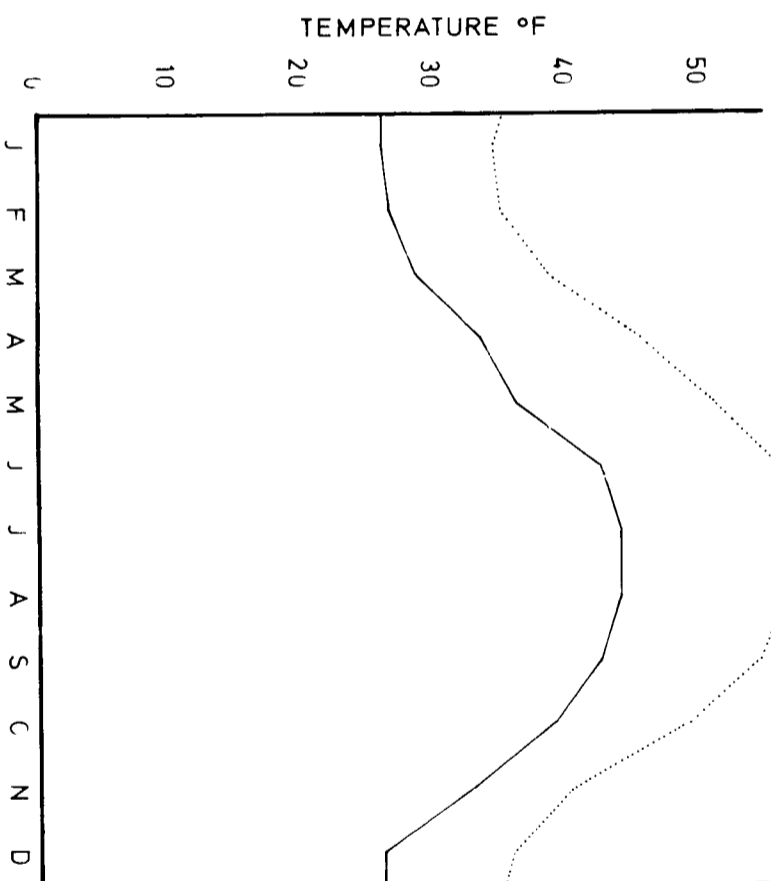


FIG. 17.

ALTITUDE-GROWING SEASON RELATIONSHIPS

(AFTER ATKINSON 1968)

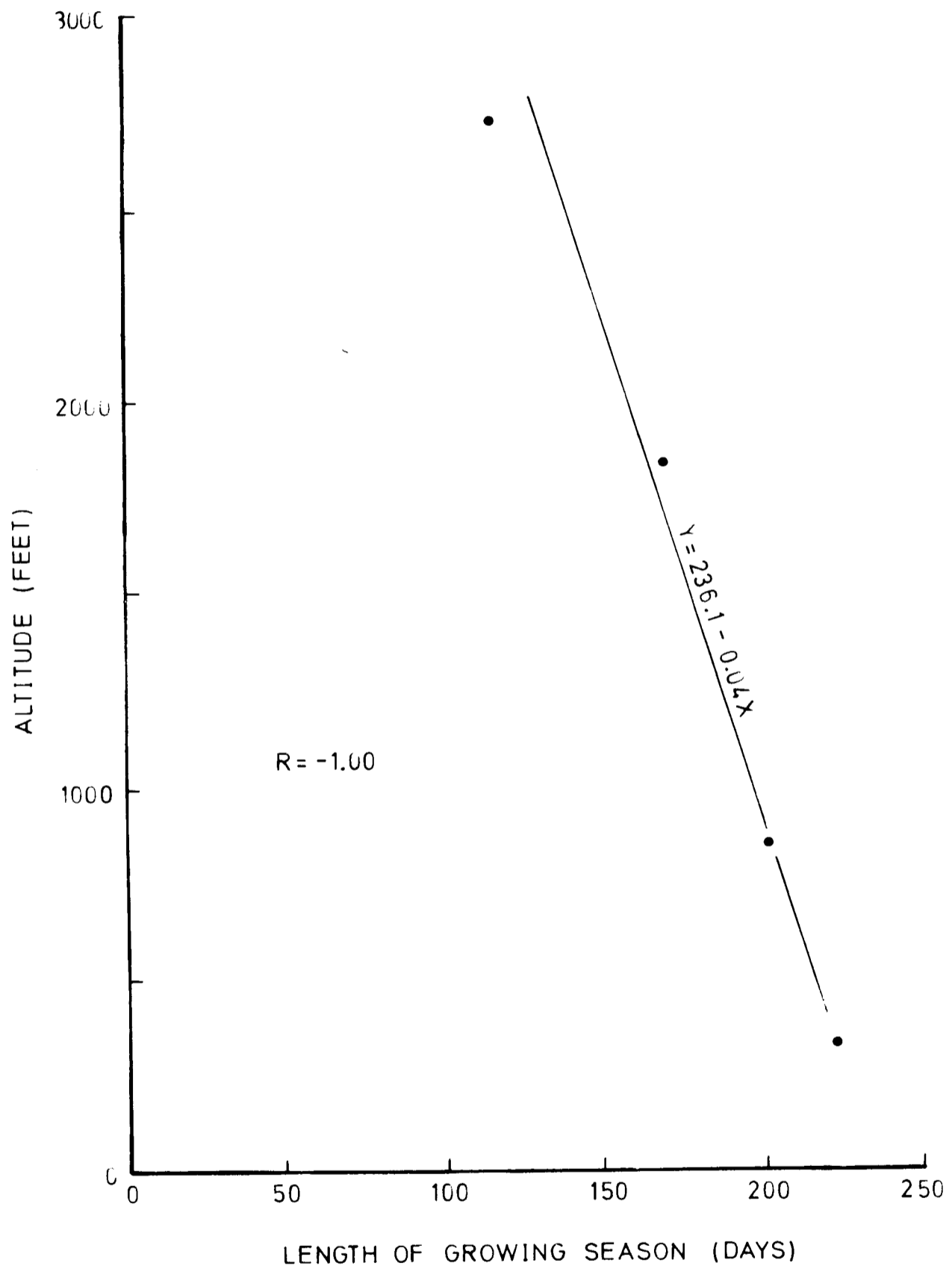


FIG. 18.

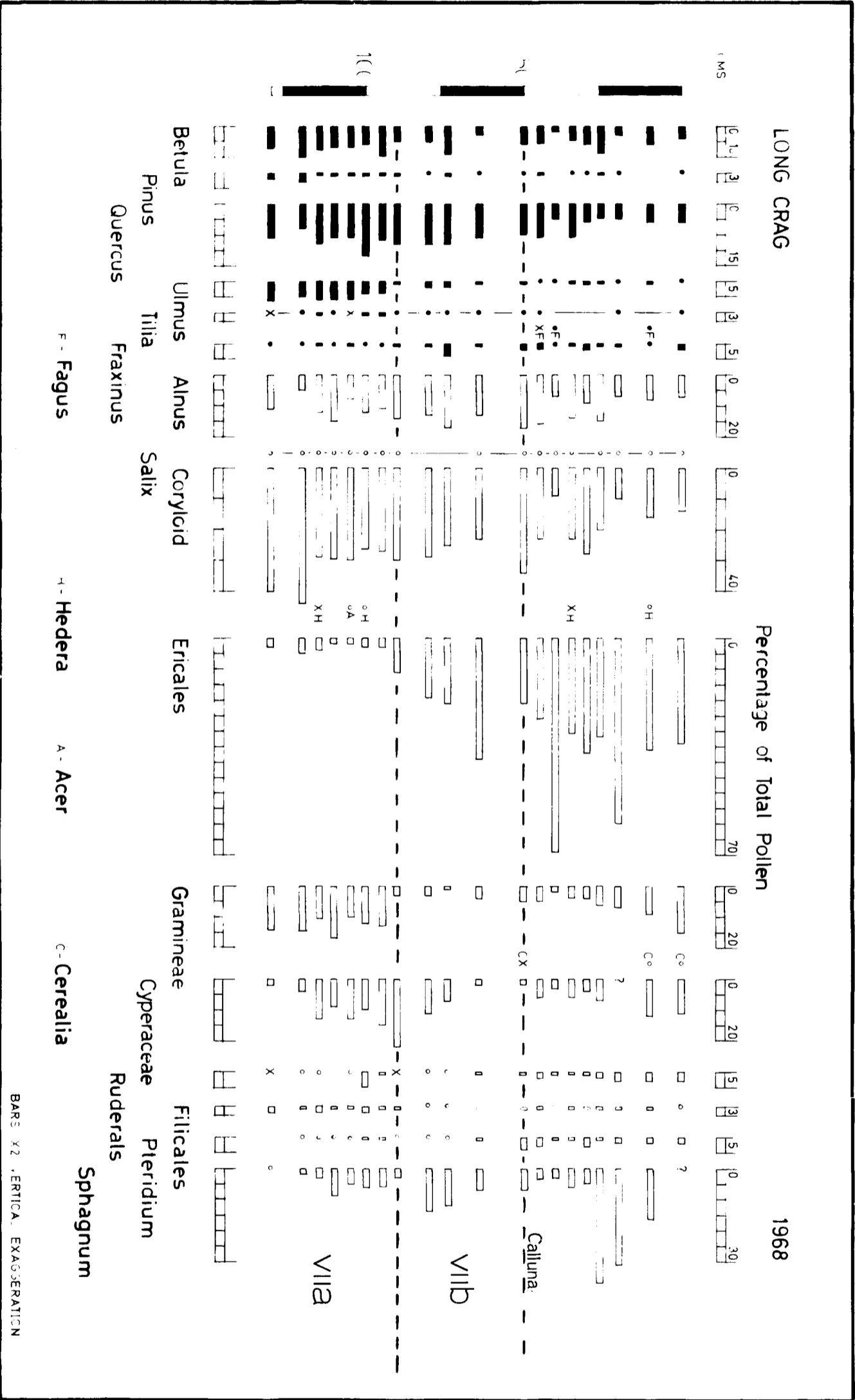


FIG. 43. Ruderalis as in Figure 42. Filipendula is omitted from the total count at 95, 100 cm.

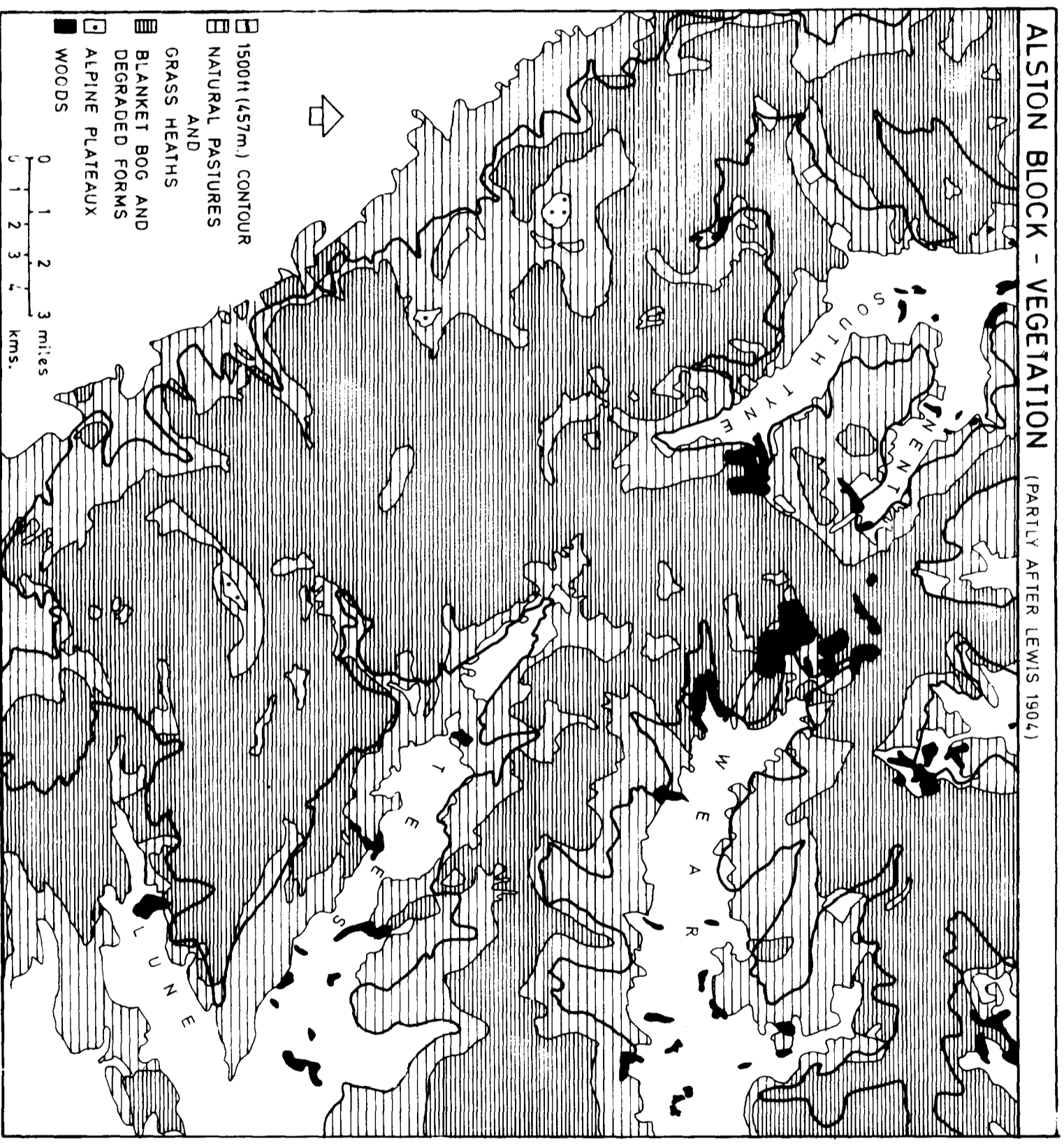


FIG. 19.

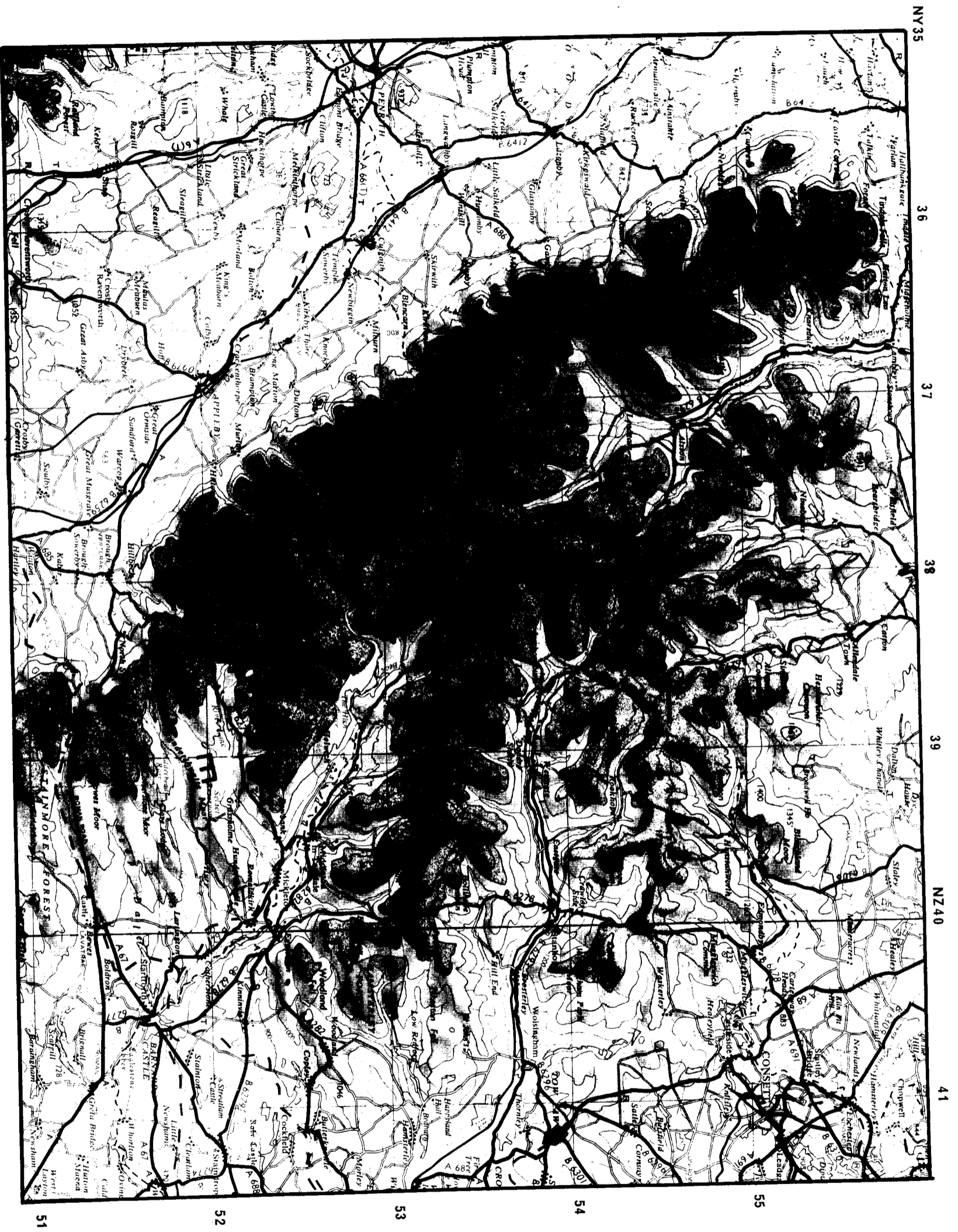


FIG. 20.

LONG CRAG

Percentage of Tree Pollen

1968

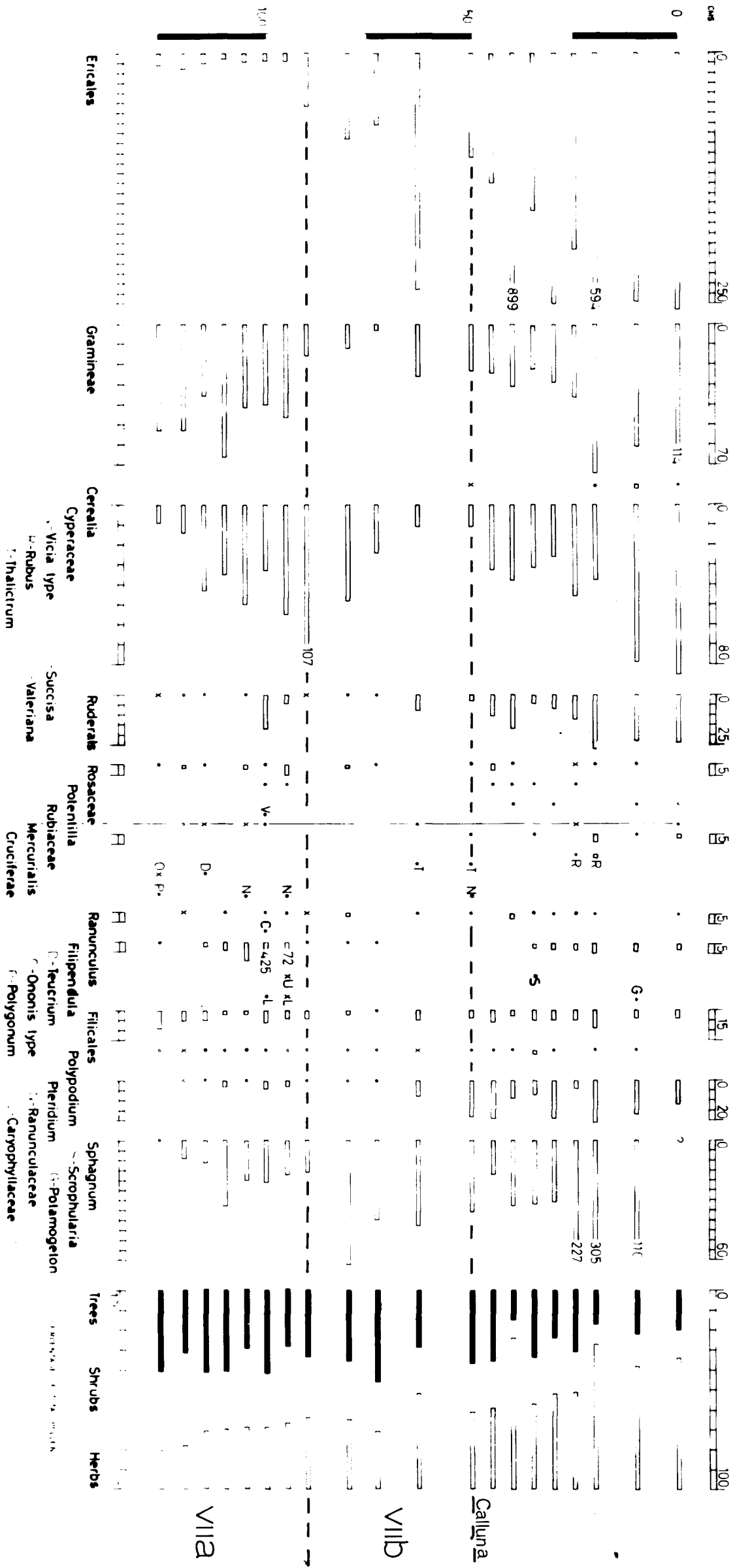


FIG. 42. Ruderals: *Plantago lanceolata*, *P. major/media* type, *Rumex*, *Compositae*, *Chenopodiaceae*, *Artemisia*, *Umbelliferae* and *Melampyrum*.

SITES CHOSEN FOR ANALYSIS

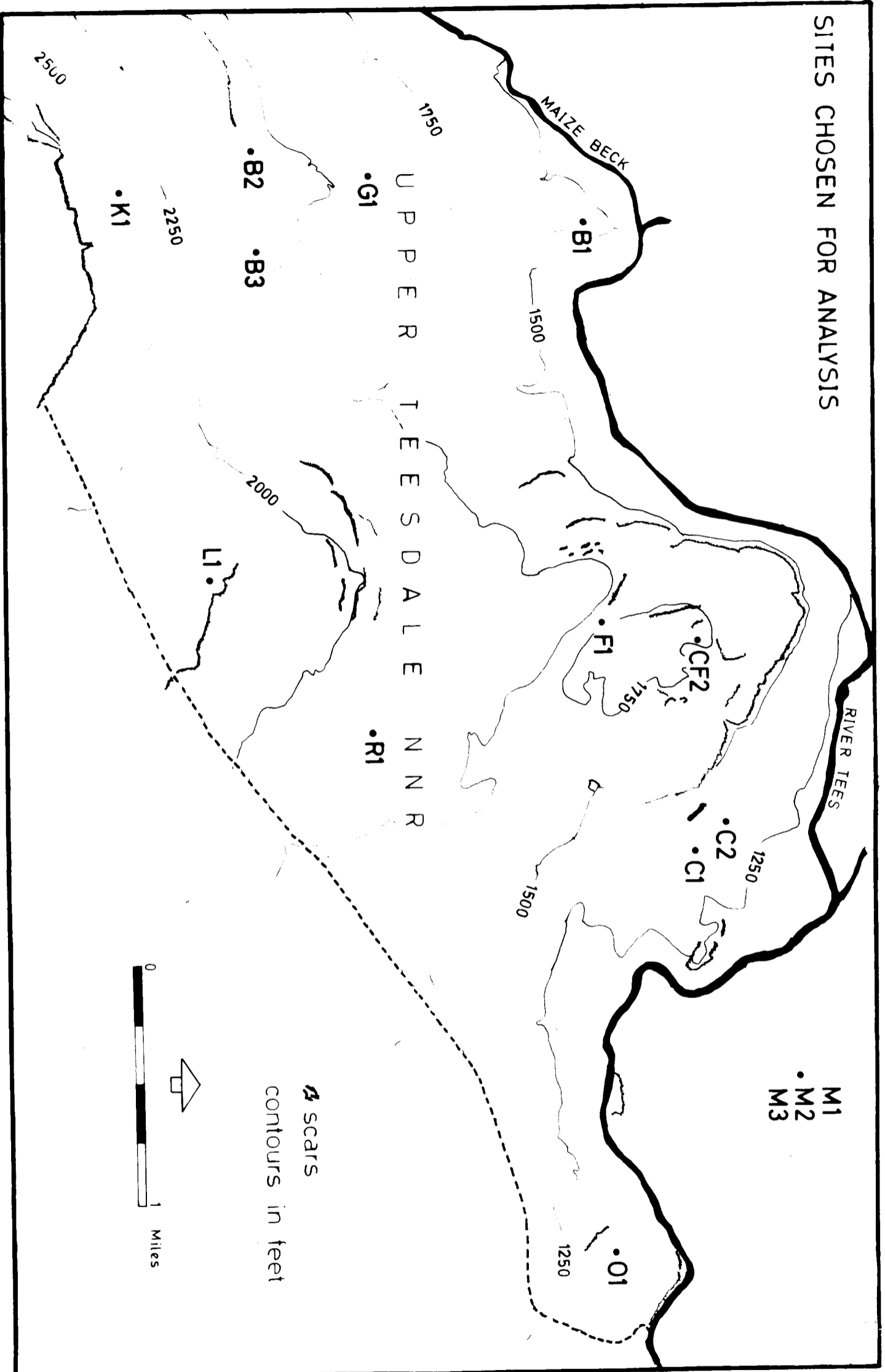


FIG. 21.

EXPLANATION OF SYMBOLS USED


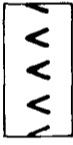
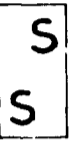
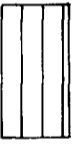

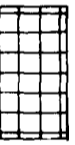

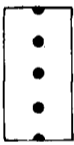
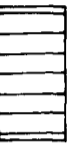

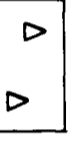
	Surface root mat		Wood peat
	Calluna peat		Fen peat
	Eriophorum peat		Moss peat
	Sphagnum peat		Charcoal
	Monocotyledon peat		Quartz fragments
			Solid obstacle

FIG. 22.

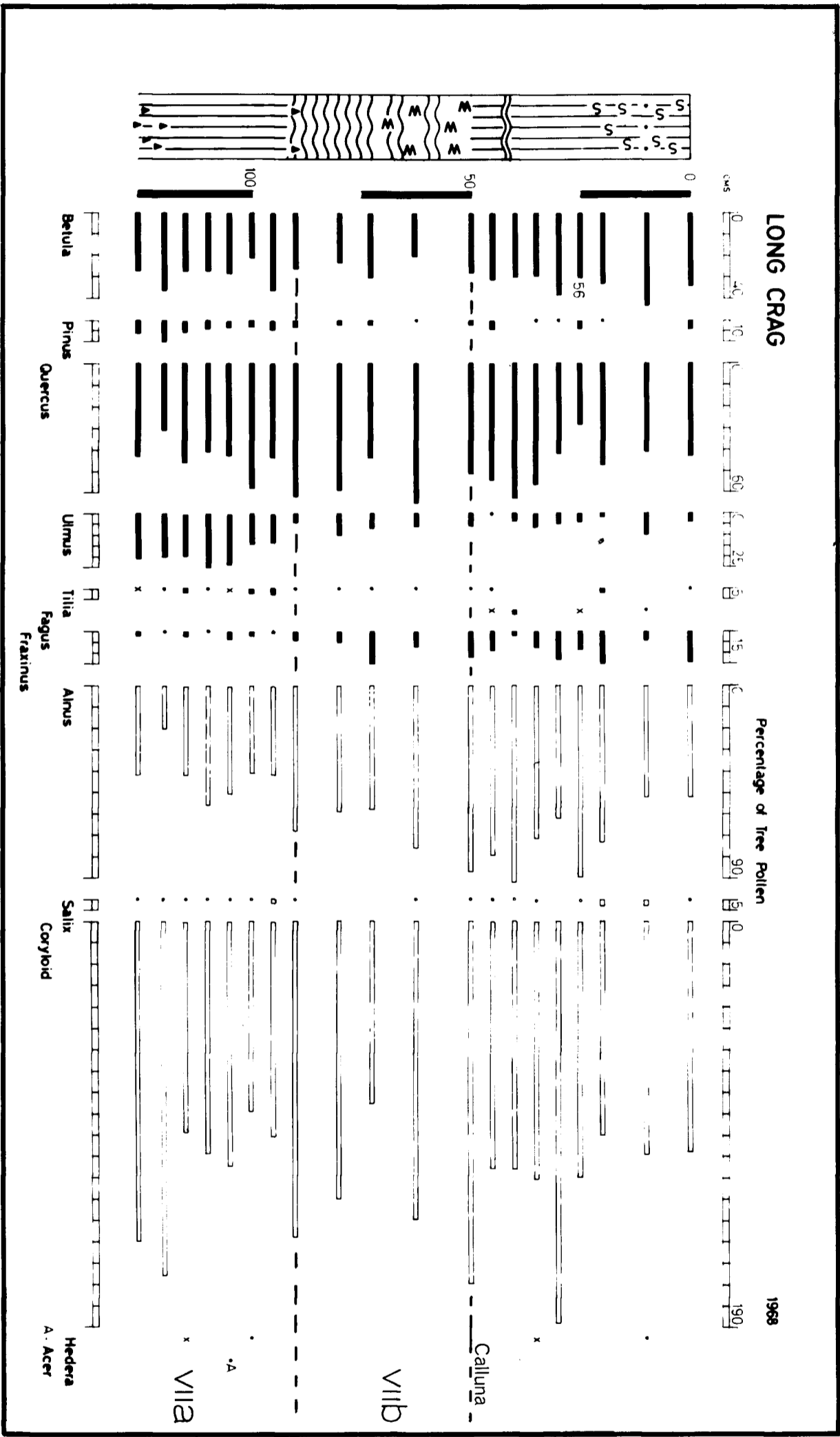
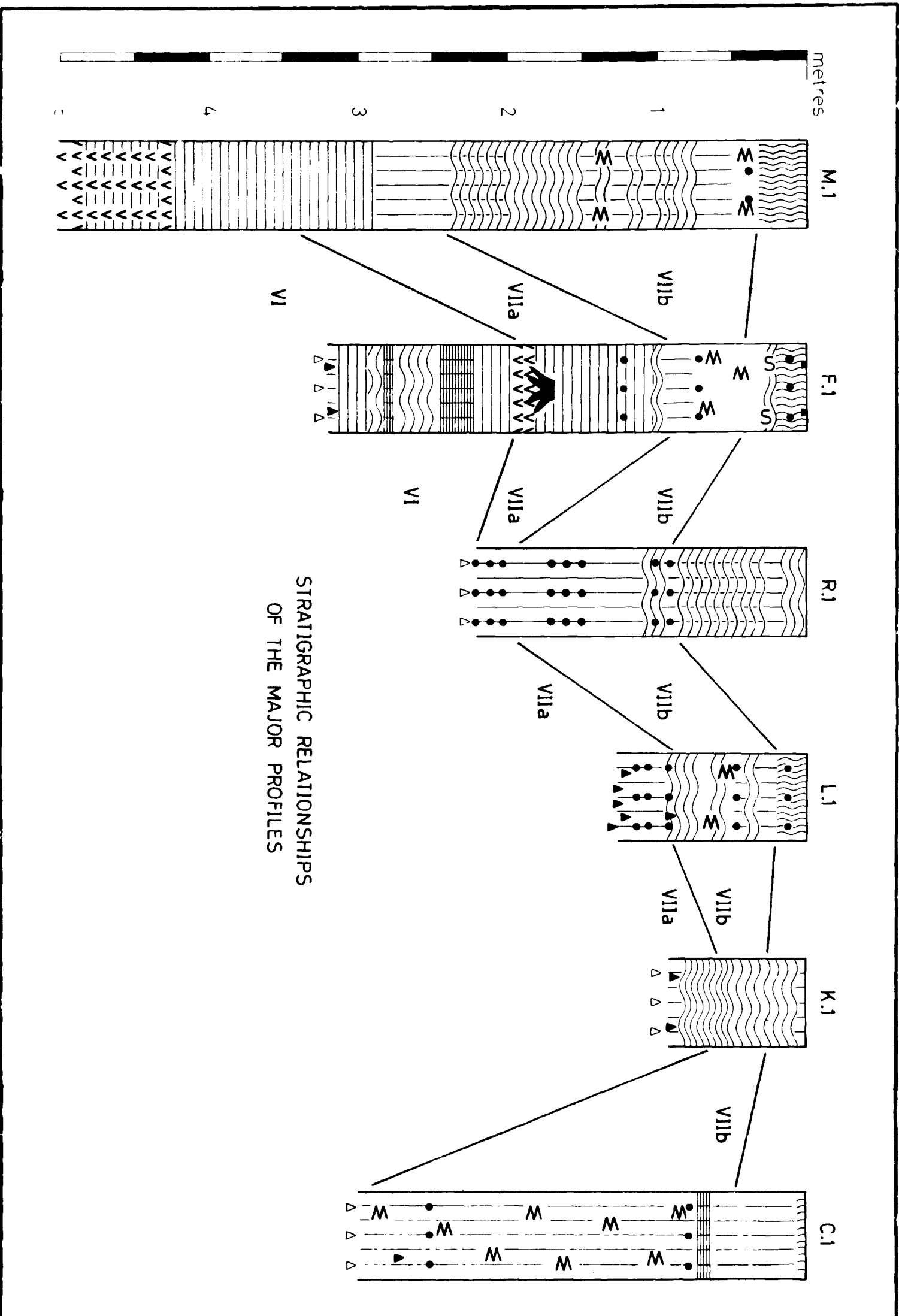


FIG. 41.



STRATIGRAPHIC RELATIONSHIPS
OF THE MAJOR PROFILES

FIG. 23.

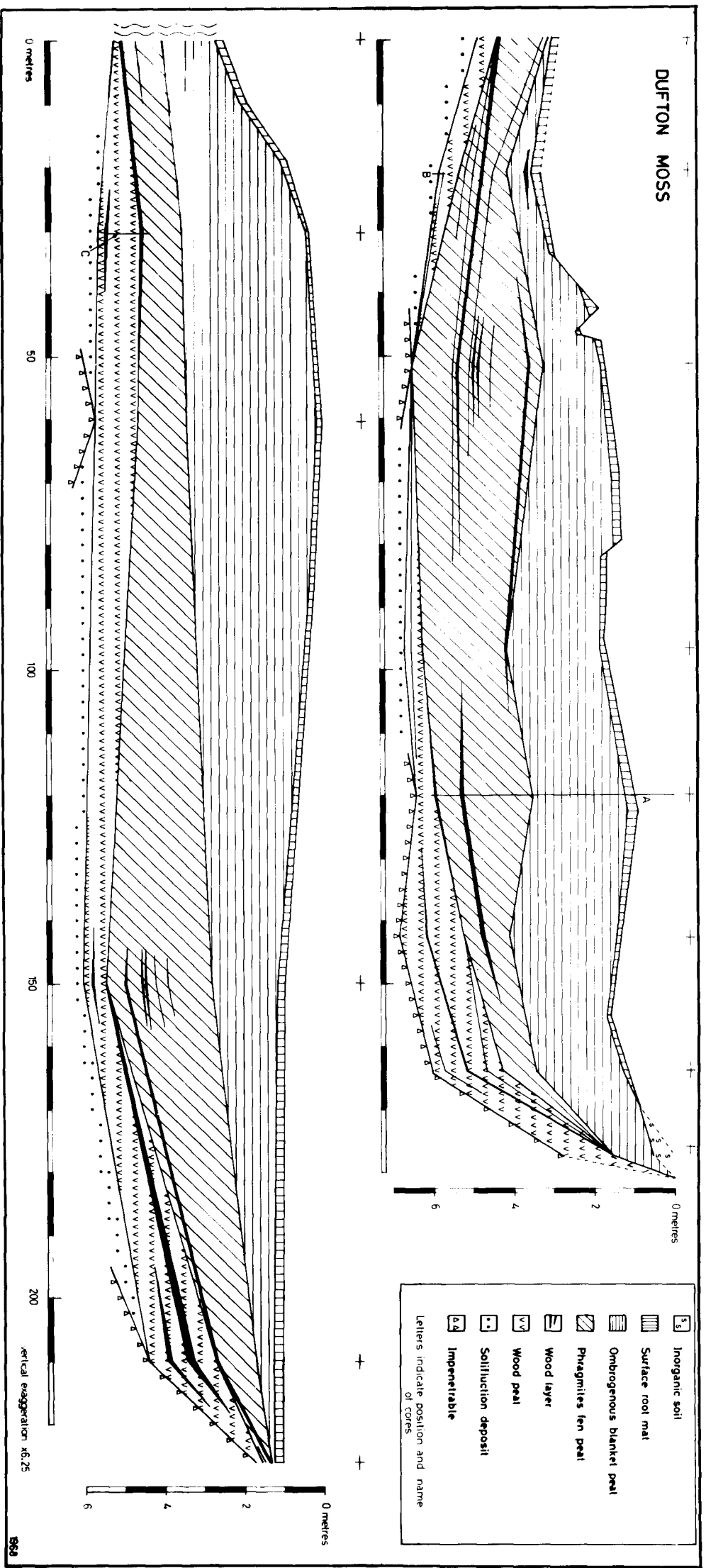


FIG. 24.

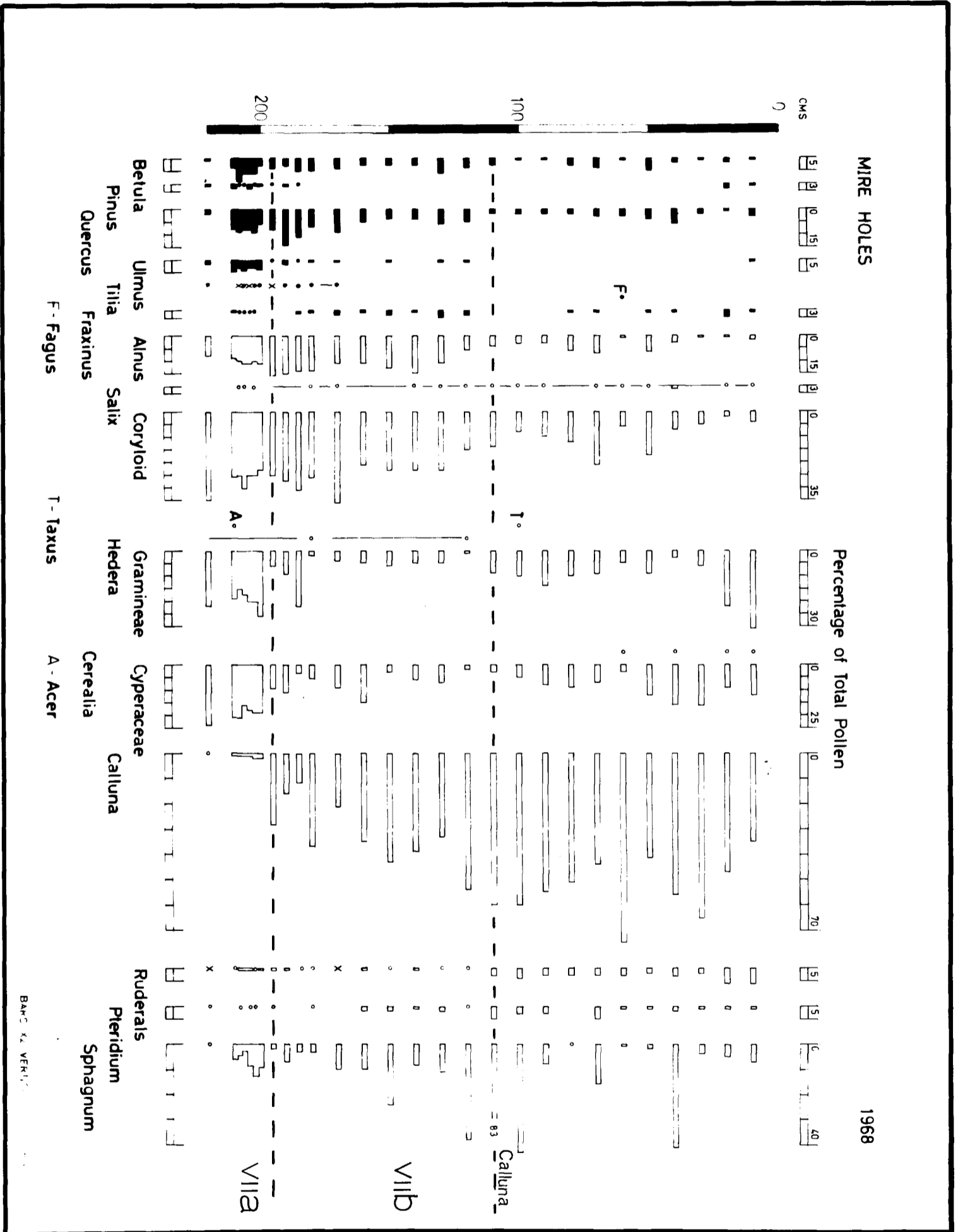


FIG. 40. Ruderals as in fig. 39.

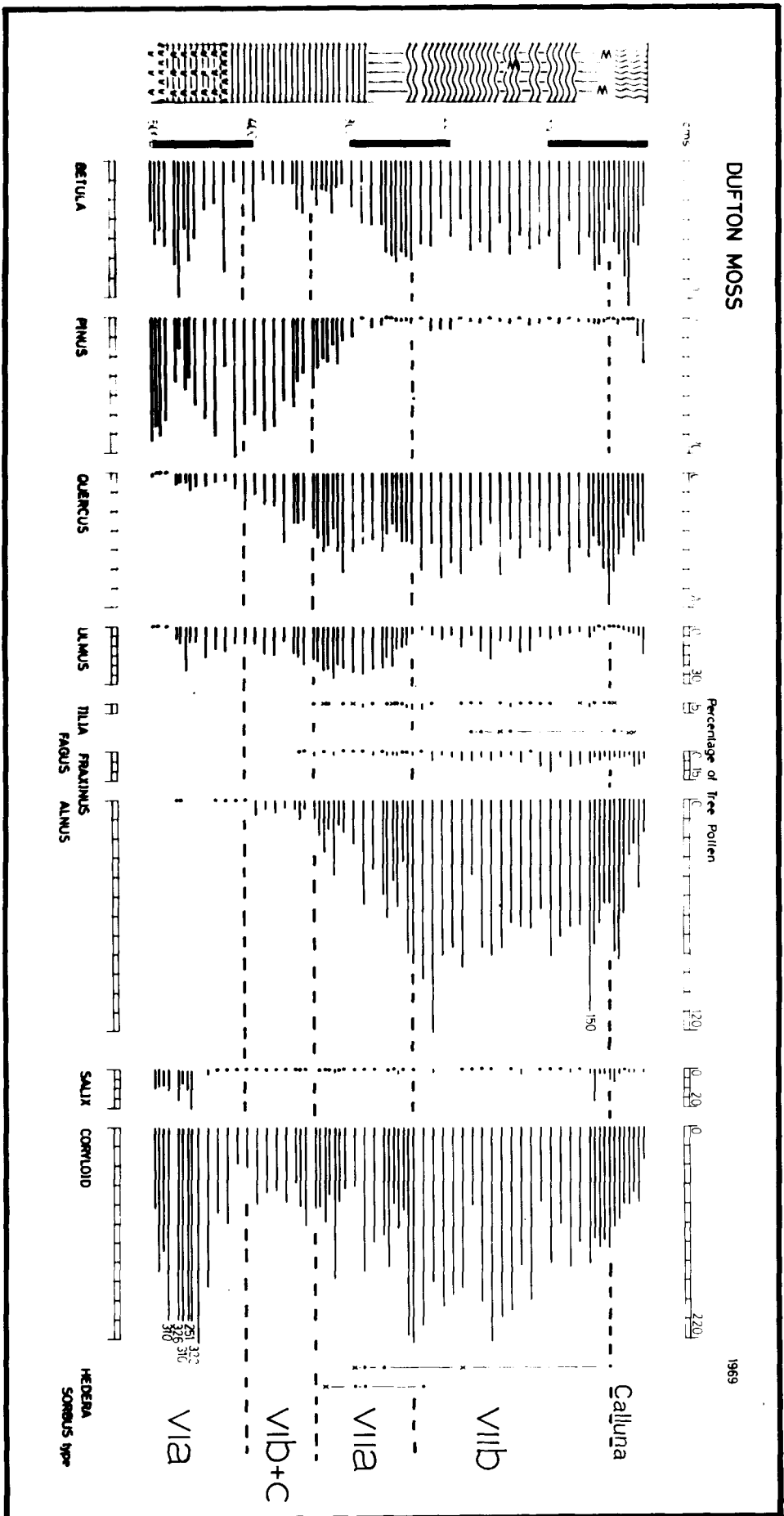


FIG. 25.

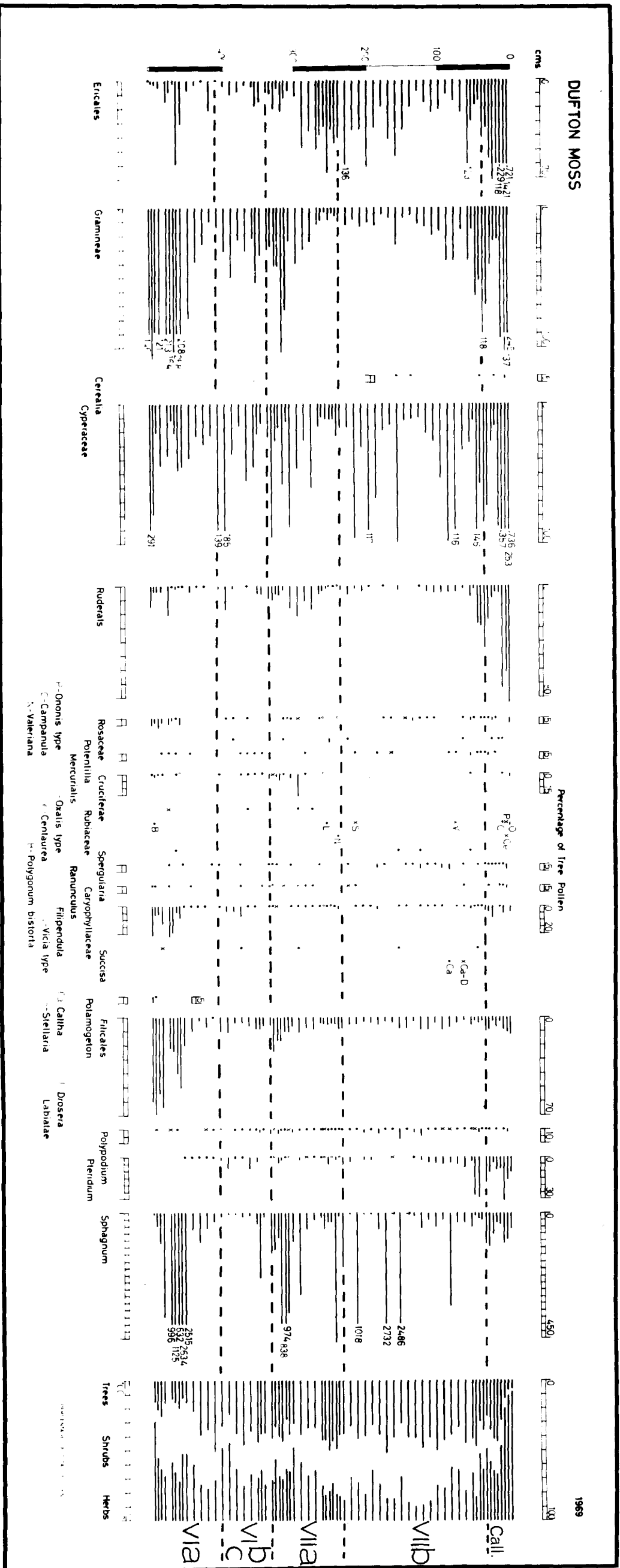


FIG. 26. Ruderals: *Plantago lanceolata*, *P. major/media* type, *Rumex*,
Chenopodiaceae, *Compositae*, *Artemisia*, *Umbelliferae* and
Melampyrum.

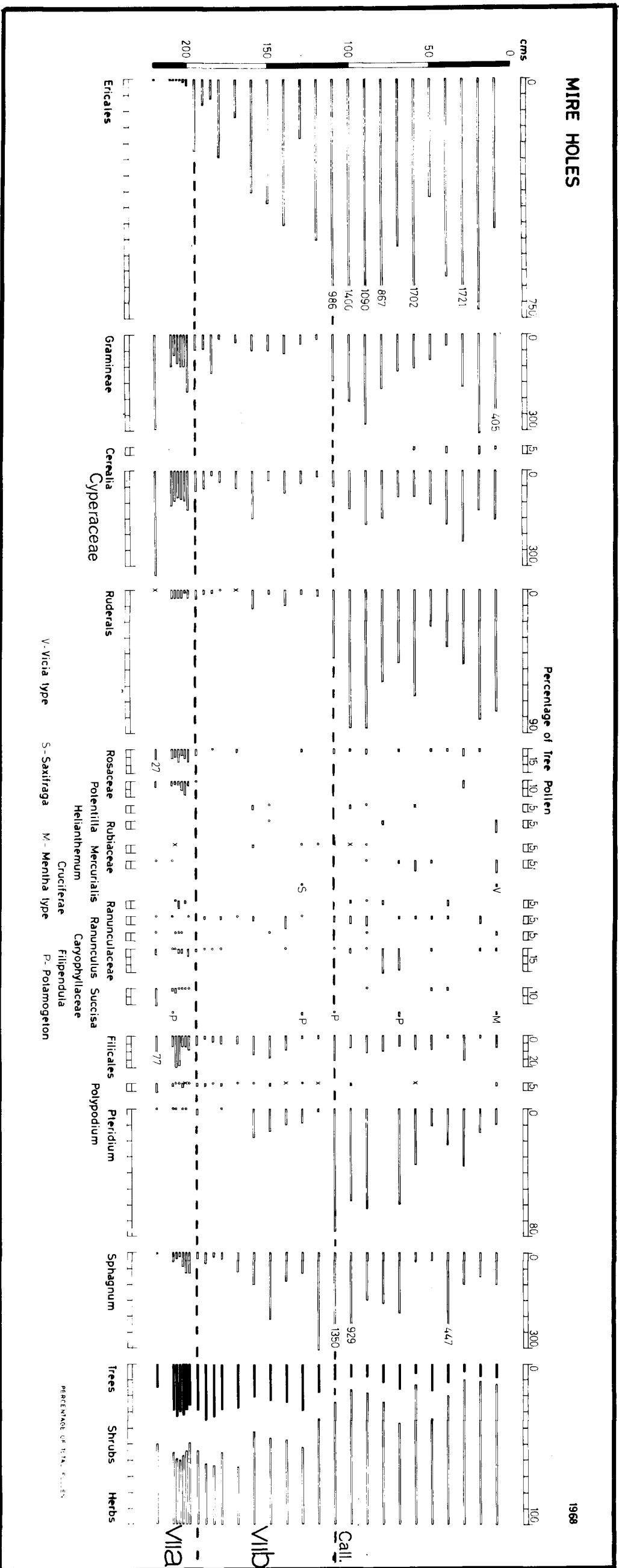


FIG. 39. Ruderals: *Plantago lanceolata*, *P. major/media* type, *Compositae*, *Artemisia*, *Rumex*, *Umbelliferae*, *Chenopodiaceae*, *Melampyrum* and *Centaurea cyanus*.

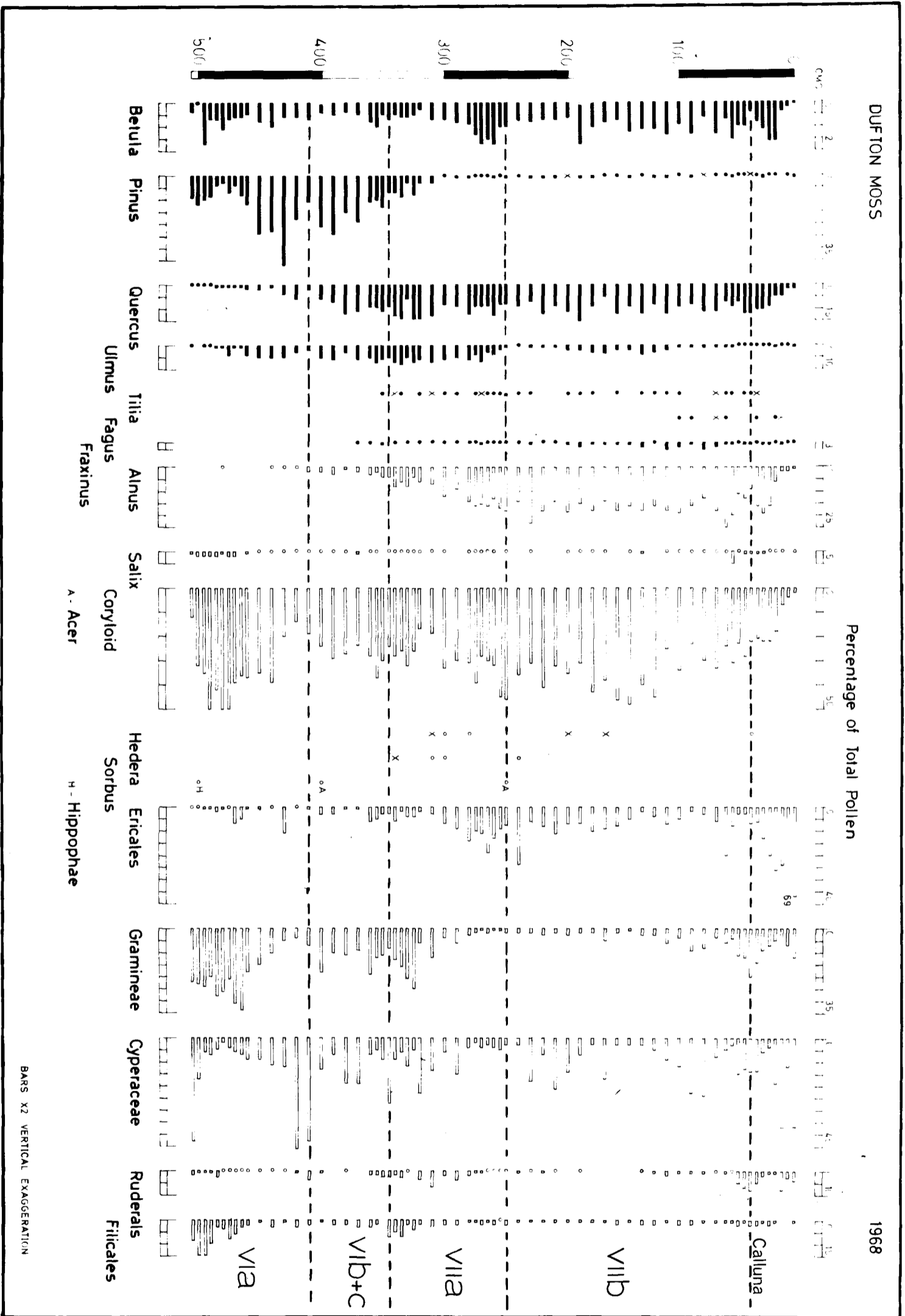


FIG. 27. Ruderals as in Fig. 26.

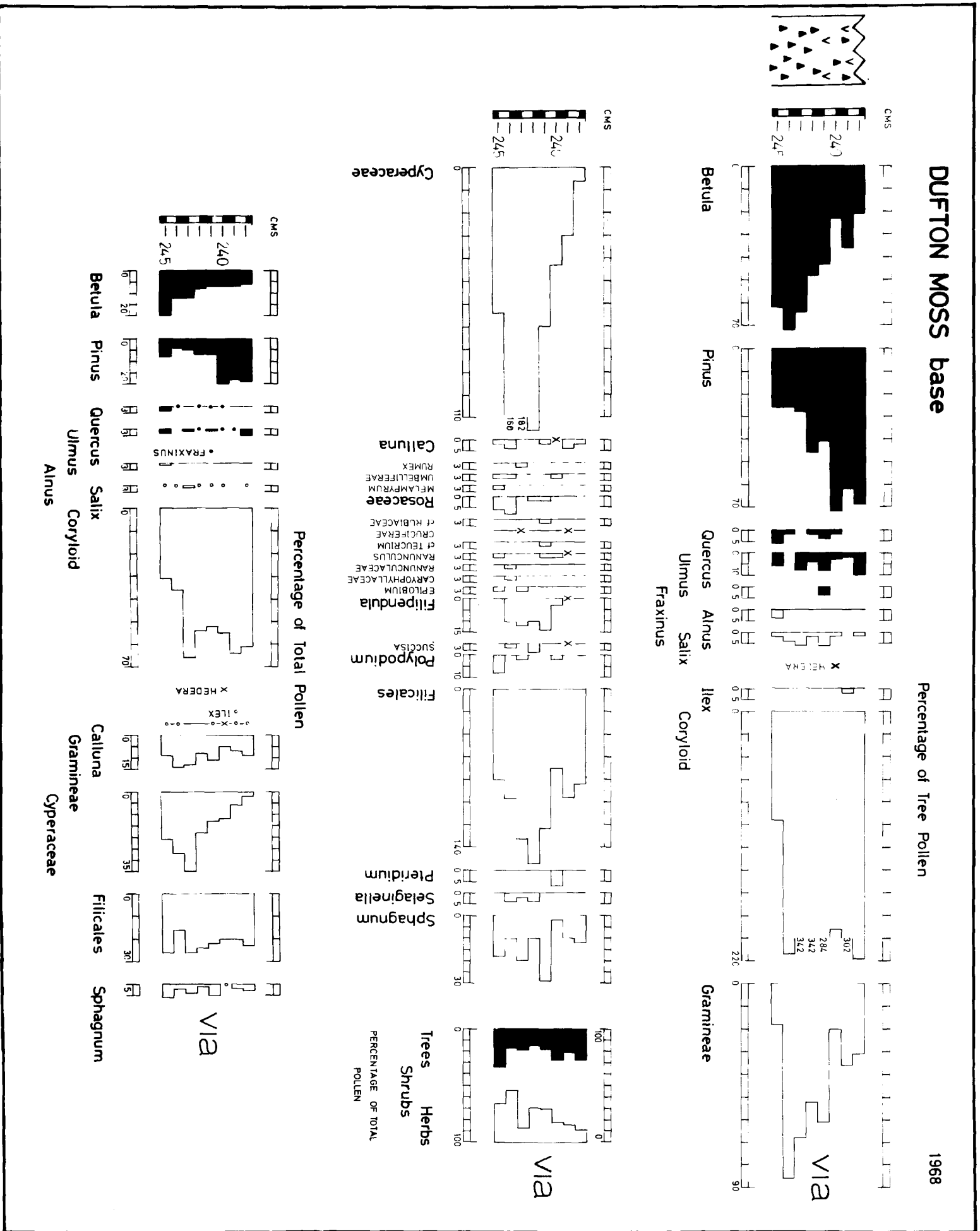


FIG. 28. *Melampyrum*, *Umbelliferae* and *Rumex* are grouped as ruderals in data sheet 2.

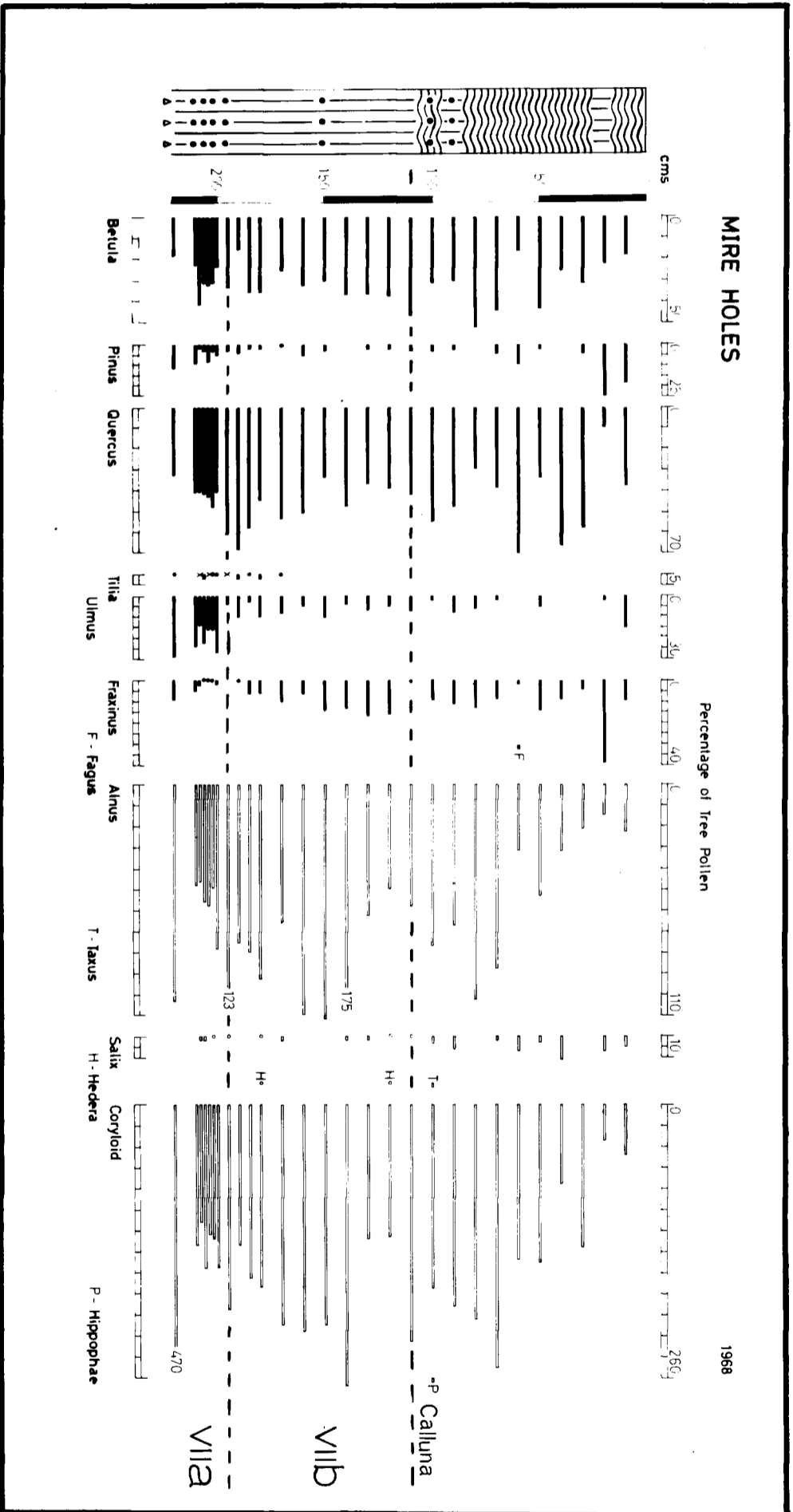


FIG. 38.

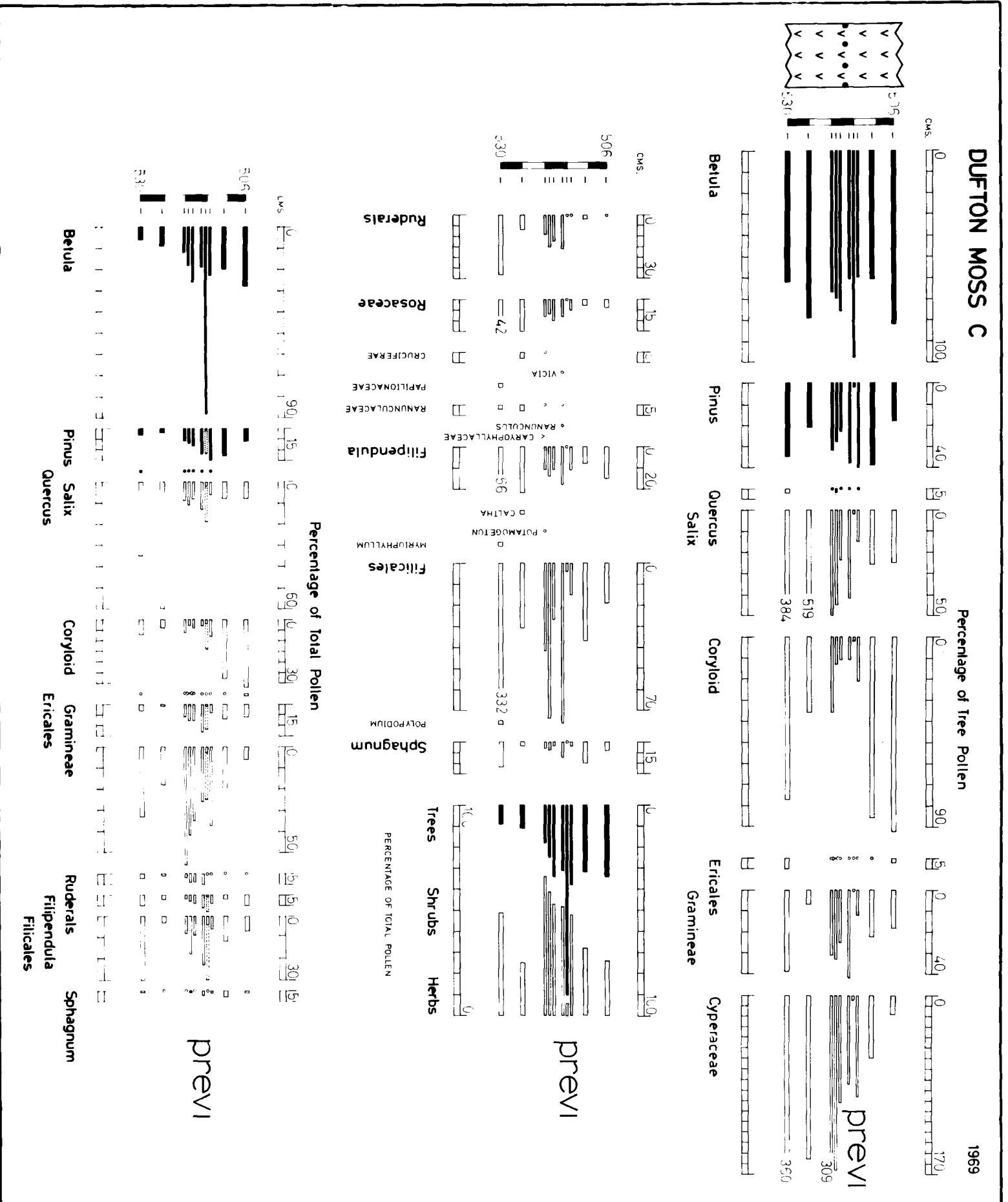


FIG. 29. Ruderals: Plantago major/media type, Rumex, Compositae, Chenopodiaceae, Umbelliferae and Melampyrum. The dotted lines indicate the percentage occurrence with Betula excluded from the total pollen.

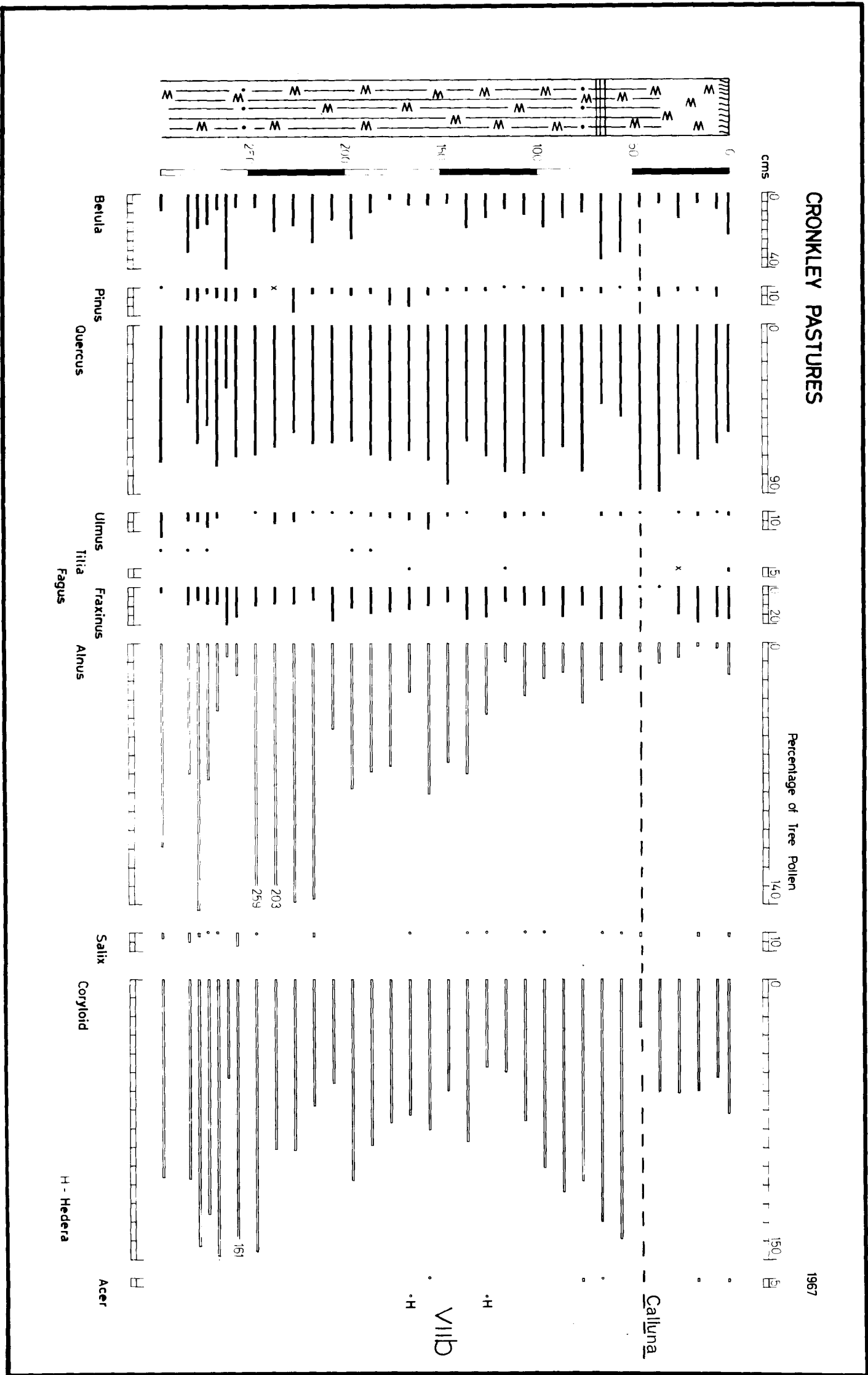


FIG. 30.

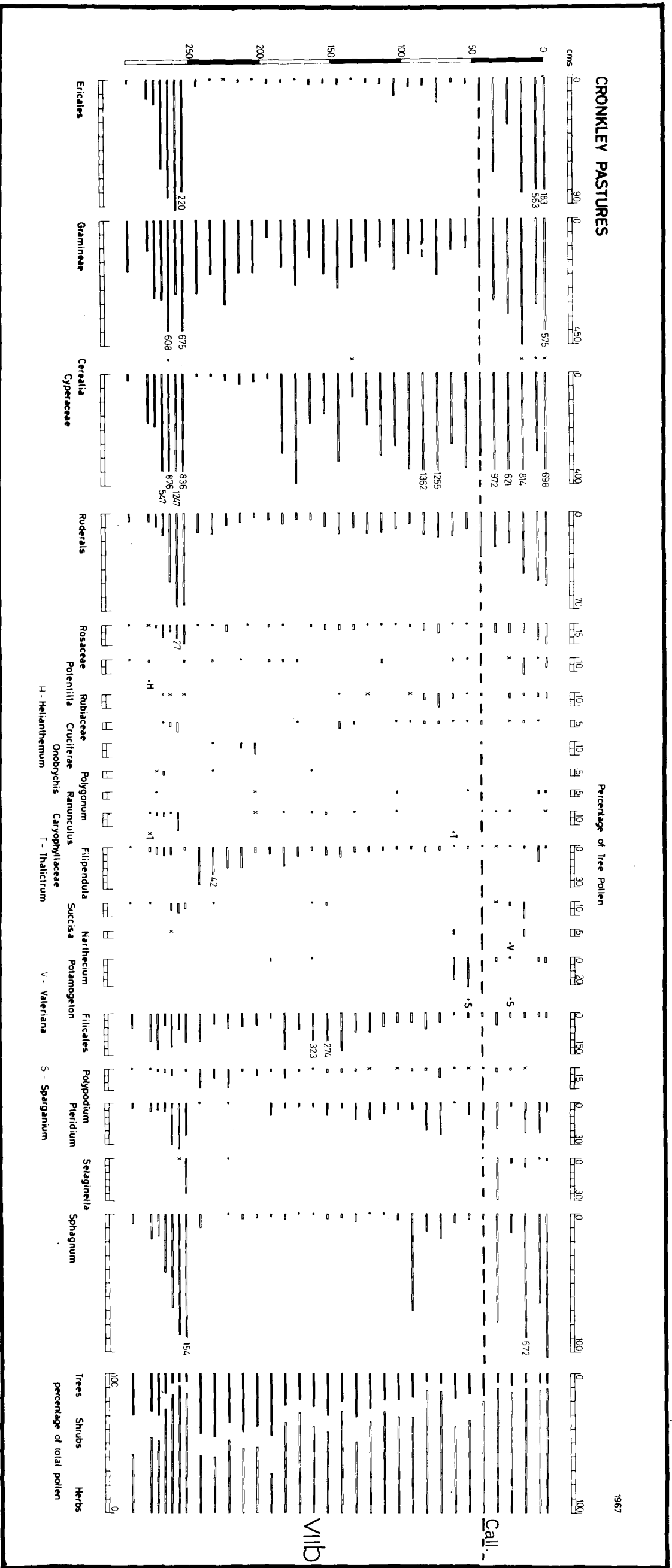


FIG. 31. Ruderals: *Plantago lanceolata*, *P. major/media* type, *Artemisia*, *Rumex*, *Chenopodiaceae*, *Compositae*, *Melampyrum*, *Polygonum convolvulus* type, *Umbelliferae* and *Urtica*.

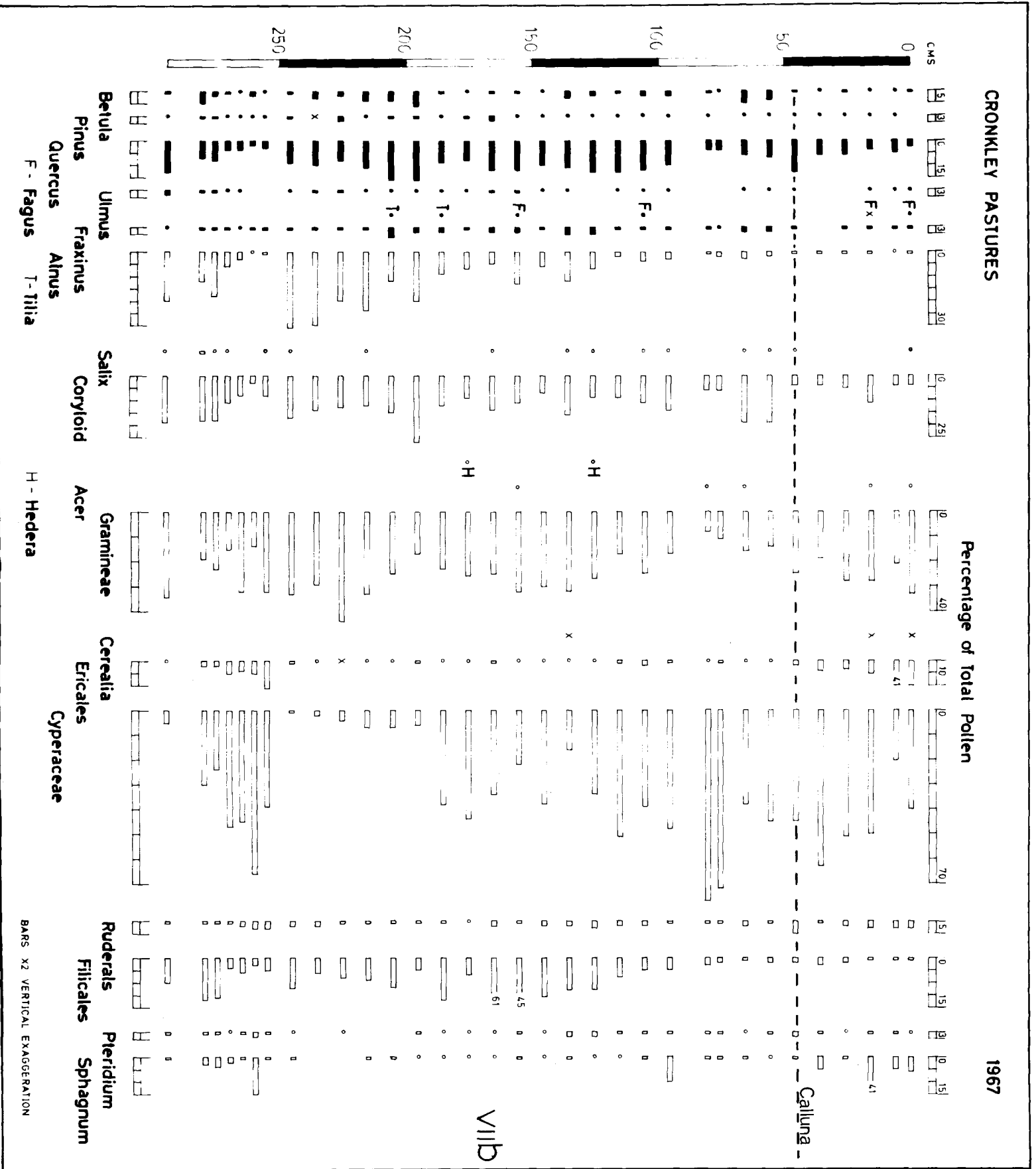


FIG. 32. Ruderals as in fig. 31.

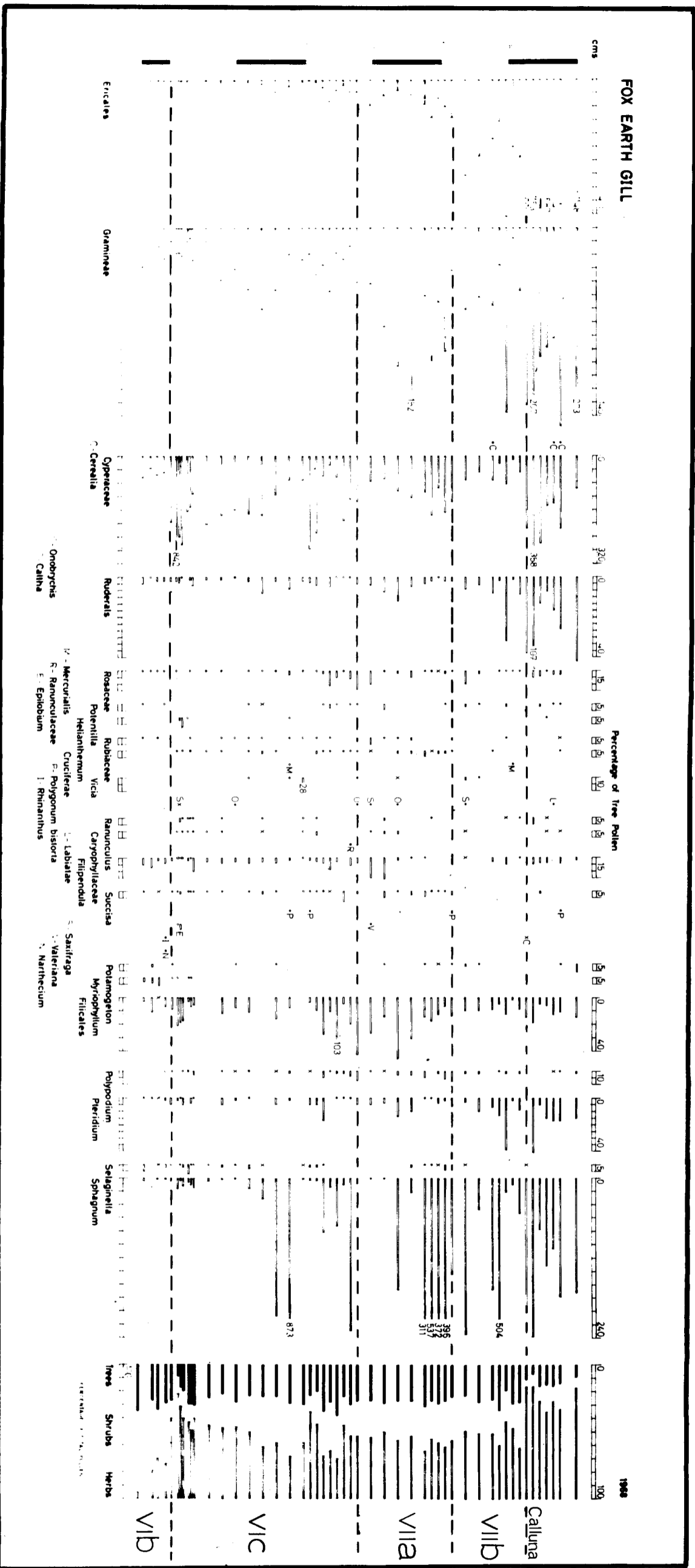


FIG. 36. Ruderals: *Plantago lanceolata*, *P. major/media* type, *Compositae*, *Rumex*, *Artemisia*, *Umbelliferae*, *Chenopodiaceae*, *Urtica* and *Melampyrum*.

CRONKLEY PASTURES base

Percentage of Tree Pollen

1968

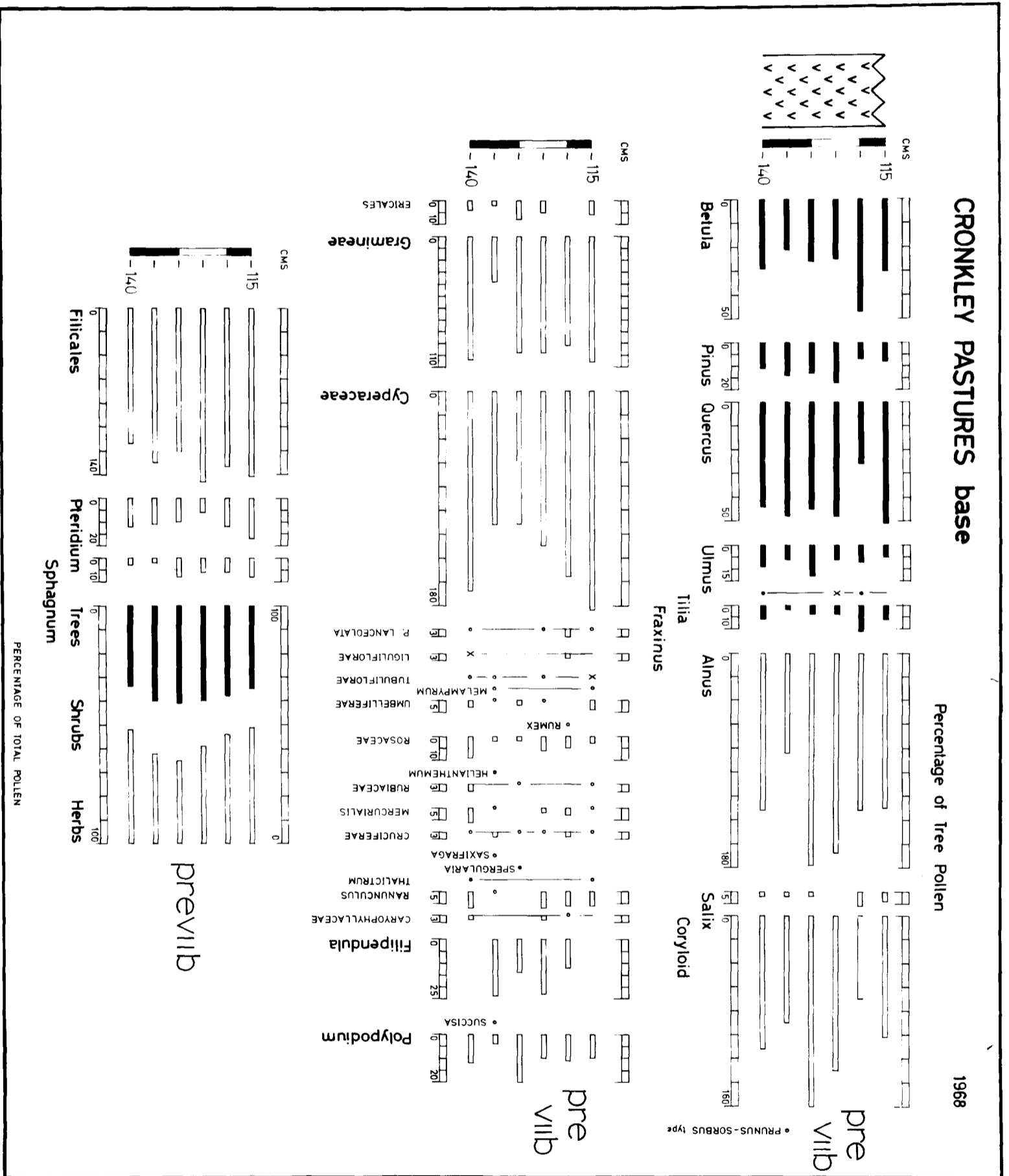


FIG. 33. Plantago lanceolata, Compositae, Melampyrum, Umbelliferae and Rumex are grouped as ruderals in data sheet 5.

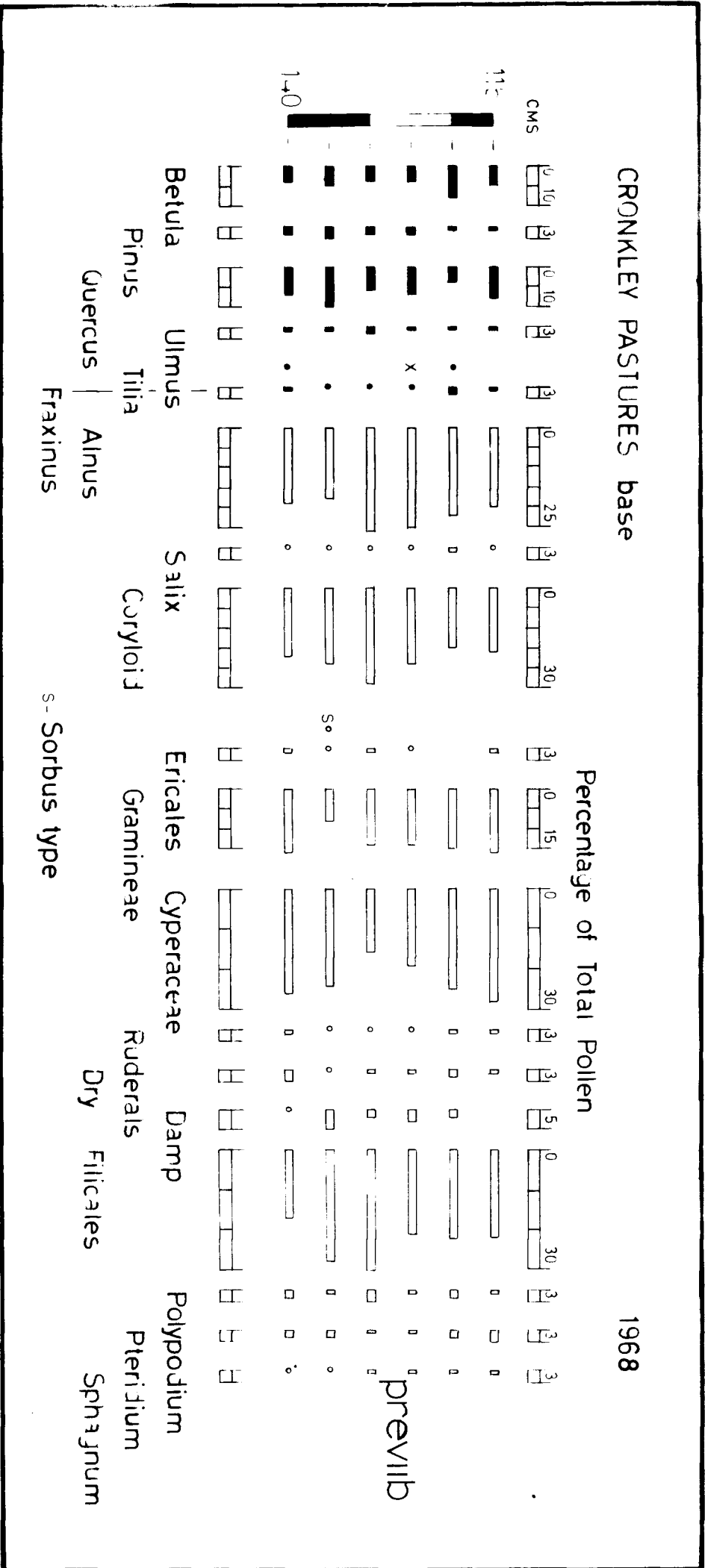


FIG. 34: Ruderals: *Plantago lanceolata*, *Compositae*, *Melampyrum*,
Umbelliferae and *Rumex*.
 Dry: *Rosaceae*, *Helianthemum*, *Rubiaceae*, *Cruciferae*, *Saxifraga*
 and *Spergularia*.
 Damp: *Thalictrum*, *Ranunculus*, *Caryophyllaceae*, *Filipendula*,
Succisa and *Mercurialis*.



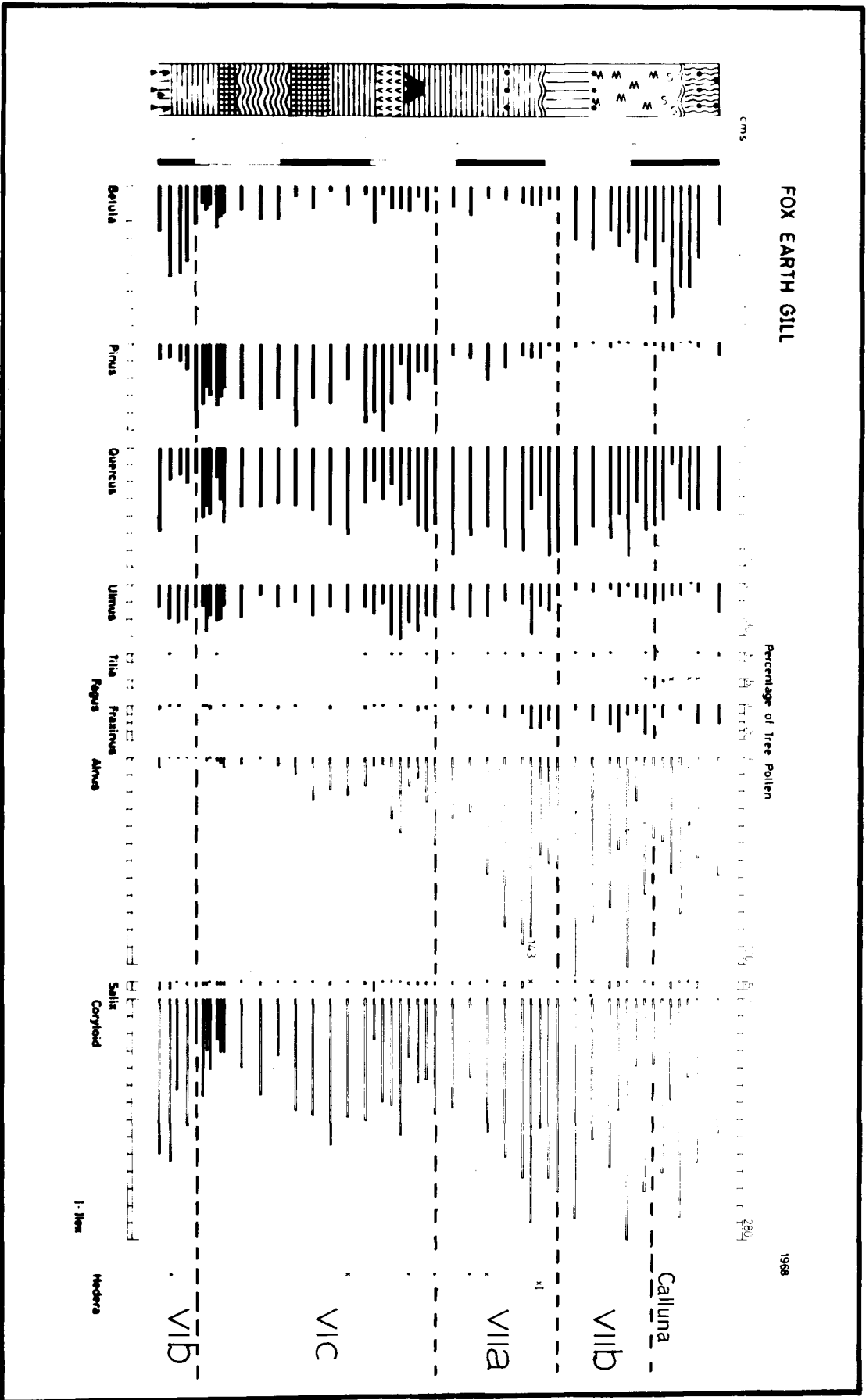


FIG. 35.

DEPTHS												
5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	51.0	55.0	60.0	
70.0	80.0	90.0	99.0	110.0	120.0	130.0	140.0	150.0	160.0	170.0	180.0	
190.0	200.0	210.0	220.0	230.0	240.0	245.0	250.0	255.0	260.0	265.0	270.0	
280.0	290.0	300.0	310.0	315.0	320.0	325.0	328.0	335.0	340.0	350.0	355.0	
360.0	370.0	380.0	390.0	400.0	410.0	420.0	430.0	440.0	450.0	460.0	465.0	
470.0	475.0	480.0	485.0	490.0	495.0	500.0						
COUNT												
BET												
11.0	24.0	45.0	124.0	89.0	68.0	58.0	35.0	63.0	78.0	83.0	47.0	
77.0	42.0	78.0	59.0	67.0	64.0	58.0	75.0	50.0	35.0	66.0	89.0	
44.0	53.0	44.0	65.0	71.0	77.0	65.0	79.0	90.0	71.0	74.0	50.0	
58.0	51.0	41.0	23.0	22.0	40.0	25.0	23.0	36.0	25.0	53.0	40.0	
24.0	21.0	24.0	20.0	53.0	35.0	23.0	53.0	52.0	53.0	62.0	33.0	
69.0	56.0	71.0	74.0	96.0	83.0	31.0						
PIN												
11.0	5.0	1.0	1.0	2.0	4.0	1.0	9001.0	3.0	4.0	4.0	3.0	
3.0	9001.0	4.0	2.0	5.0	6.0	2.0	5.0	4.0	1.0	5.0	5.0	
9001.0	8.0	9.0	10.0	2.0	5.0	3.0	4.0	3.0	2.0	2.0	6.0	
9.0	2.0	17.0	22.0	38.0	21.0	36.0	33.0	40.0	61.0	55.0	53.0	
89.0	76.0	112.0	113.0	86.0	113.0	149.0	120.0	146.0	114.0	71.0	20.0	
74.0	13.0	44.0	89.0	57.0	108.0	64.0						
QU												
17.0	20.0	48.0	38.0	52.0	60.0	71.0	98.0	75.0	55.0	48.0	52.0	
63.0	72.0	47.0	61.0	61.0	49.0	68.0	55.0	83.0	20.0	50.0	70.0	
79.0	64.0	81.0	54.0	82.0	56.0	48.0	61.0	54.0	39.0	51.0	62.0	
61.0	59.0	70.0	97.0	64.0	42.0	59.0	64.0	51.0	48.0	45.0	42.0	
50.0	64.0	33.0	32.0	19.0	39.0	17.0	8.0	12.0	16.0	11.0	6.0	
10.0	7.0	8.0	2.0	1.0	3.0	2.0						
ULM												
6.0	3.0	4.0	5.0	3.0	2.0	2.0	1.0	3.0	1.0	5.0	7.0	
5.0	5.0	7.0	10.0	10.0	19.0	22.0	13.0	13.0	13.0	20.0	7.0	
17.0	7.0	10.0	8.0	4.0	6.0	13.0	19.0	21.0	31.0	20.0	33.0	
39.0	40.0	40.0	41.0	31.0	39.0	34.0	36.0	28.0	28.0	32.0	25.0	
28.0	15.0	29.0	28.0	15.0	18.0	19.0	28.0	28.0	36.0	10.0	5.0	
45.0	4.0	9.0	2.0	2.0	0.0	1.0						
TIL												
0.0	0.0	0.0	0.0	0.0	0.0	9001.0	1.0	1.0	0.0	2.0	2.0	
9001.0	0.0	0.0	1.0	1.0	2.0	3.0	0.0	2.0	0.0	1.0	1.0	
1.0	0.0	0.0	1.0	5.0	5.0	3.0	2.0	1.0	9001.0	2.0	2.0	
2.0	3.0	9001.0	1.0	0.0	0.0	1.0	9001.0	0.0	1.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						
FA												
0.0	0.0	9001.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	
9001.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FX												
2.0	4.0	9.0	4.0	5.0	6.0	4.0	7.0	5.0	2.0	2.0	2.0	
12.0	18.0	5.0	16.0	13.0	2.0	10.0	4.0	2.0	2.0	2.0	2.0	
7.0	4.0	3.0	8.0	1.0	3.0	1.0	2.0	2.0	2.0	2.0	2.0	
4.0	2.0	1.0	2.0	0.0	3.0	0.0	1.0	2.0	2.0	2.0	2.0	
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						
ALN												
8.0	26.0	25.0	49.0	89.0	117.0	109.0	77.0	50.0	22.0	11.0	12.0	
104.0	91.0	101.0	122.0	89.0	94.0	101.0	77.0	121.0	52.0	21.0	7.0	
129.0	104.0	119.0	177.0	133.0	127.0	105.0	54.0	51.0	52.0	16.0	10.0	
63.0	85.0	39.0	41.0	20.0	56.0	23.0	42.0	12.0	17.0	4.0	1.0	
9.0	8.0	14.0	9.0	14.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	
0.0	1.0	1.0	0.0	0.0	0.0	0.0						

SX											
1.0	0.0	2.0	4.0	2.0	4.0	10.0	9.0	4.0	4.0	25.0	2.0
2.0	3.0	2.0	1.0	1.0	0.0	5.0	1.0	0.0	1.0	1.0	1.0
1.0	0.0	0.0	3.0	0.0	1.0	0.0	2.0	3.0	2.0	2.0	0.0
1.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	2.0	0.0	1.0	1.0
3.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	1.0	7.0	0.0	13.0
20.0	6.0	21.0	18.0	12.0	16.0	10.0					
COR											
16.0	44.0	74.0	138.0	122.0	136.0	144.0	180.0	179.0	186.0	169.0	169.0
194.0	201.0	143.0	214.0	123.0	257.0	220.0	295.0	312.0	164.0	284.0	159.0
249.0	238.0	273.0	238.0	342.0	340.0	286.0	144.0	179.0	118.0	228.0	170.0
210.0	237.0	107.0	122.0	120.0	229.0	107.0	140.0	126.0	137.0	201.0	132.0
112.0	139.0	133.0	131.0	141.0	89.0	80.0	212.0	211.0	365.0	348.0	206.0
497.0	248.0	434.0	518.0	198.0	294.0	84.0					
HED											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
0.0	2.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0					
SOR											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	2.0	1.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0					
ACE											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0					
HIP											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	1.0	0.0					
ERI											
339.0	796.0	245.0	202.0	107.0	81.0	44.0	59.0	23.0	26.0	41.0	119.0
37.0	20.0	14.0	31.0	36.0	23.0	12.0	29.0	55.0	40.0	66.0	37.0
50.0	85.0	52.0	51.0	225.0	62.0	60.0	59.0	114.0	48.0	62.0	71.0
62.0	48.0	18.0	13.0	20.0	32.0	9.0	32.0	16.0	13.0	24.0	11.0
7.0	6.0	16.0	19.0	7.0	2.0	43.0	2.0	7.0	15.0	4.0	11.0
5.0	7.0	20.0	8.0	4.0	4.0	1.0					
GRA											
115.0	77.0	100.0	39.0	37.0	58.0	95.0	167.0	79.0	72.0	111.0	71.0
25.0	52.0	55.0	26.0	31.0	20.0	19.0	9.0	13.0	20.0	11.0	31.0
20.0	15.0	21.0	13.0	21.0	16.0	8.0	7.0	15.0	11.0	11.0	11.0
41.0	30.0	67.0	45.0	113.0	150.0	66.0	66.0	44.0	51.0	51.0	51.0
43.0	55.0	45.0	97.0	54.0	28.0	20.0	55.0	73.0	174.0	61.0	71.0
204.0	131.0	284.0	202.0	137.0	210.0	146.0					
CYP											
346.0	146.0	382.0	150.0	24.0	38.0	100.0	121.0	11.0	11.0	11.0	11.0
43.0	159.0	140.0	80.0	43.0	30.0	16.0	17.0	11.0	11.0	11.0	11.0
100.0	159.0	45.0	140.0	28.0	26.0	31.0	18.0	23.0	11.0	11.0	11.0
104.0	41.0	78.0	164.0	21.0	83.0	26.0	43.0	147.0	11.0	11.0	11.0
86.0	17.0	32.0	69.0	320.0	286.0	49.0	61.0	51.0	11.0	11.0	11.0
41.0	10.0	49.0	73.0	32.0	153.0	291.0					

MEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
	0.0	0.0	1.0	0.0	0.0	0.0	0.0					
RDS	2.0	0.0	5.0	0.0	1.0	3.0	1.0	2.0	1.0	0.0	1.0	2.0
	2.0	0.0	0.0	0.0	2.0	1.0	1.0	3.0	9001.0	0.0	1.0	2.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.0	2.0
	0.0	0.0	9001.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	2.0	2.0	6.0	6.0	9.0	6.0	5.0					
POT	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
MER	0.0	0.0	0.0	0.0	1.0	0.0	3.0	2.0	1.0	1.0	0.0	2.0
	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
	3.0	0.0	1.0	2.0	0.0	0.0	0.0					
CRUC	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
	0.0	1.0	27.0	6.0	0.0	1.0	8.0	4.0	9001.0	6.0	0.0	0.0
	2.0	2.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0
	2.0	0.0	0.0	1.0	1.0	5.0	1.0					
RUB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	9001.0	0.0	0.0	0.0	0.0					
OXA	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
ONO	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
CAM	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
SPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					

DRO											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCR											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POTA											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FILI											
6.0	6.0	0.0	6.0	10.0	5.0	12.0	14.0	4.0	14.0	5.0	7.0
4.0	5.0	10.0	14.0	6.0	13.0	9.0	5.0	2.0	6.0	8.0	6.0
8.0	5.0	4.0	8.0	8.0	13.0	11.0	9.0	5.0	8.0	5.0	5.0
15.0	12.0	19.0	13.0	17.0	14.0	27.0	27.0	38.0	10.0	12.0	14.0
15.0	10.0	8.0	8.0	19.0	20.0	3.0	15.0	5.0	23.0	32.0	33.0
19.0	19.0	29.0	107.0	86.0	135.0	60.0					
POLY											
2.0	1.0	1.0	0.0	1.0	0.0	2.0	1.0	1.0	3.0	9001.0	2.0
1.0	1.0	9001.0	9001.0	1.0	2.0	5.0	3.0	1.0	5.0	2.0	2.0
4.0	2.0	3.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	9001.0	1.0
1.0	2.0	2.0	3.0	3.0	1.0	9001.0	5.0	2.0	5.0	3.0	2.0
3.0	1.0	2.0	1.0	0.0	2.0	2.0	9001.0	0.0	0.0	1.0	0.0
9001.0	0.0	9001.0	0.0	0.0	9001.0	0.0					
PTR											
5.0	1.0	33.0	13.0	13.0	6.0	15.0	26.0	44.0	39.0	0.0	9.0
12.0	7.0	6.0	7.0	7.0	6.0	2.0	1.0	0.0	0.0	0.0	9001.0
0.0	3.0	3.0	0.0	5.0	8.0	2.0	3.0	2.0	6.0	1.0	1.0
2.0	9001.0	3.0	0.0	0.0	1.0	0.0	6.0	4.0	1.0	0.0	1.0
5.0	15.0	1.0	1.0	14.0	5.0	2.0	2.0	2.0	5.0	1.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0					
SPH											
27.0	53.0	116.0	65.0	50.0	104.0	166.0	155.0	141.0	31.0	17.0	17.0
54.0	46.0	475.0	34.0	82.0	37.0	82.0	18.0	0.0	1840.0	0.0	17.0
88.0	7.0	11.0	1486.0	9.0	299.0	19.0	773.0	58.0	57.0	0.0	17.0
44.0	33.0	502.0	196.0	560.0	1412.0	1299.0	141.0	215.0	241.0	17.0	17.0
75.0	17.0	26.0	4.0	4.0	33.0	59.0	118.0	248.0	132.0	37.0	17.0
176.0	100.0	1325.0	625.0	180.0	96.0	2.0					

SX											
2.1	0.0	1.8	2.3	1.3	2.8	7.2	6.3	2.6	2.7	17.0	1.0
1.2	2.1	1.4	0.6	0.2	0.0	3.2	0.0	0.0	1.3	0.6	0.5
0.6	0.0	0.0	2.0	0.0	0.6	0.0	1.1	1.7	1.3	1.2	0.0
0.5	0.6	0.5	0.5	1.2	2.0	0.6	0.6	1.2	0.0	0.5	0.6
1.5	1.1	1.0	1.0	1.1	1.4	0.9	0.9	0.4	3.1	0.0	20.3
10.1	7.5	15.7	10.7	7.6	8.2	10.2					
CDR											
34.0	78.5	69.1	80.7	80.7	97.1	105.1	126.7	118.5	127.3	114.9	84.9
121.2	146.7	100.7	142.6	78.3	180.9	141.0	190.3	198.7	221.6	182.0	82.3
168.2	175.0	185.7	163.0	207.2	223.6	215.0	86.2	104.0	80.8	144.3	111.8
121.3	150.9	63.3	65.5	77.4	157.9	69.0	89.1	81.2	82.0	103.0	81.4
58.3	78.9	67.1	67.8	81.5	43.4	38.4	101.4	88.6	166.6	223.0	321.8
251.0	310.0	326.3	310.1	126.9	151.5	85.7					
HED											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
0.0	1.2	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCR											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	1.2	0.5	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ACE											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HIP											
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.5	0.0					
ERI											
721.2	1421.4	228.9	118.1	70.8	57.8	32.1	41.5	15.2	17.8	29.9	72.8
23.1	14.5	9.8	20.6	22.9	16.1	7.6	18.7	35.0	54.0	42.3	19.1
33.7	62.5	35.3	34.9	136.3	40.7	45.1	35.3	66.2	32.8	39.2	48.6
35.8	30.5	10.6	6.9	12.9	22.0	5.8	20.3	10.3	7.7	14.8	17.9
3.6	3.4	8.0	9.8	4.0	0.9	20.6	0.9	2.9	6.8	30.7	59.3
2.5	8.7	15.0	4.7	2.5	2.0	1.0					
GRA											
244.6	137.5	93.4	22.8	24.5	41.4	69.3	117.6	52.3	63.0	16.3	22.6
15.6	37.9	38.7	17.3	19.7	14.0	12.1	5.8	8.2	27.0	7.6	5.1
13.5	11.0	14.2	8.9	12.7	10.5	6.0	4.1	8.7	2.7	9.4	11.8
23.6	19.1	39.6	24.1	72.9	103.4	42.5	42.0	28.3	29.9	33.8	54.3
22.3	31.2	22.7	50.2	31.2	13.6	7.6	26.3	39.0	78.9	207.6	257.8
103.0	163.7	213.5	120.9	87.8	108.2	148.9					
CER											
0.0	1.7	0.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
0.0	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CYP											
736.1	260.7	357.0	87.7	15.8	27.1	72.9	85.2	56.9	84.9	12.2	16.5
30.0	116.0	98.5	53.3	27.3	21.1	10.2	10.9	12.1	78.6	14.7	18.6
67.5	116.9	30.6	95.8	16.9	17.1	23.3	10.7	11.6	10.9	8.8	15.7
60.1	26.1	46.1	88.1	13.5	57.2	16.7	27.3	94.8	23.9	14.3	21.5
44.7	55.1	16.1	35.7	184.9	139.5	23.5	29.1	22.6	38.8	44.8	46.8
20.7	12.5	36.8	43.7	20.5	78.8	296.9					

PMM	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RX	8.5	8.9	4.6	1.7	0.6	0.0	0.0	4.2	1.3	6.1	0.0	0.5
	0.6	1.4	0.0	0.6	0.6	0.0	0.6	0.0	0.0	2.7	0.0	0.5
	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.5	0.6	1.8	5.2
	14.4	8.9	21.3	15.5	0.0	0.6	7.0	5.7	9.6	8.3	3.5	4.9
	0.0	0.5	0.0	0.0	5.2	0.9	0.0	0.0	0.0	0.0	0.0	1.5
	0.5	0.0	0.0	0.5	1.9	0.5	1.0					
CHE	2.1	1.7	3.7	0.0	0.0	1.4	1.4	2.8	1.9	0.6	0.0	0.0
	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	9001.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.0					
COT	4.2	5.3	3.7	0.5	0.6	0.0	0.7	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.8	0.0	0.0
	0.0	0.0	0.0	0.5	0.0	0.0	0.0					
COL	0.0	1.7	2.8	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ART	2.1	0.0	3.7	0.0	0.0	0.7	1.4	1.4	2.6	0.0	0.0	0.0
	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0	0.5	0.6	0.0	0.0
	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	3.0					
UMB	2.1	1.7	2.8	0.0	0.0	1.4	0.0	0.7	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.7	0.0	0.0	0.0	0.6	0.7	0.5	0.0	0.6	0.6	0.6
	0.0	0.6	0.0	0.5	0.0	1.3	0.0	0.6	0.0	0.5	0.0	0.6
	0.0	0.0	0.0	2.0	10.9	0.9	0.0	0.4	0.8	1.8	0.0	0.0
	1.5	1.2	20.3	2.3	1.2	9001.0	10.2					
CENT	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
	0.0	0.0	0.7	0.0	0.0	0.0	0.0					

ALN	0.8	2.2	2.4	6.3	16.3	19.3	15.8	9.2	12.7	11.5	20.2	25.2
	17.8	13.5	16.4	19.1	18.0	16.3	18.5	16.2	17.7	13.8	18.0	14.7
	18.3	14.0	17.8	22.8	14.0	17.6	16.7	11.9	15.6	14.9	16.5	14.0
	9.0	11.9	7.1	5.8	4.4	7.9	5.6	8.4	4.1	3.7	1.6	3.5
	1.9	1.5	3.0	1.6	1.8	0.3	0.2	0.1	0.1	0.0	0.0	0.0
	0.0	0.2	0.0	0.0	0.0	0.0	0.0					
SX	0.1	0.0	0.1	0.5	0.3	0.6	1.4	1.0	0.6	0.4	4.6	0.2
	0.3	0.4	0.3	0.1	0.2	0.0	0.9	0.1	0.0	0.2	0.1	0.1
	0.1	0.0	0.0	0.3	0.0	0.1	0.0	0.4	0.5	0.4	0.3	0.0
	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.2	0.3	0.0	0.1	0.2
	0.6	0.3	0.4	0.3	0.2	0.4	0.4	0.3	0.1	0.7	0.0	2.4
	2.0	1.2	2.0	1.7	2.1	1.7	1.4					
CGR	1.7	3.7	7.2	17.9	22.4	22.4	20.9	21.6	27.8	23.1	31.1	23.8
	33.2	29.9	23.2	33.6	24.9	44.6	40.3	48.3	45.8	37.8	42.6	30.7
	35.3	32.2	41.0	30.7	36.0	46.5	45.5	31.7	29.8	28.5	38.9	32.3
	30.0	33.3	19.5	17.3	26.5	32.4	26.3	28.2	23.6	30.5	37.0	27.9
	24.5	27.3	28.9	24.5	18.8	14.3	19.8	38.8	34.7	37.3	36.5	39.0
	50.4	49.6	42.5	50.5	34.9	32.2	12.4					
HED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.2	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
SOR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.2	0.1	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
ACE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
HIPP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.0					
ERI	36.8	68.6	24.0	26.2	19.7	13.3	6.3	7.1	3.5	3.2	8.1	20.4
	6.3	2.9	2.2	4.8	7.3	4.0	2.2	4.7	8.0	9.2	9.9	7.1
	7.1	11.5	7.8	6.5	23.7	8.4	9.5	13.0	19.0	11.5	10.5	14.0
	8.8	6.7	3.2	1.8	4.4	4.5	2.2	6.4	3.0	2.8	5.3	6.1
	1.5	1.1	3.4	3.5	0.9	0.3	10.6	0.3	1.1	1.5	5.0	7.2
	0.5	1.4	1.9	0.7	0.7	0.4	0.1					
GRA	12.4	6.6	9.8	5.0	6.8	9.5	13.8	20.1	12.2	11.4	4.4	6.3
	4.2	7.7	8.9	4.0	6.2	3.4	3.4	1.4	1.9	4.6	1.8	1.9
	2.8	2.0	3.1	1.6	2.2	2.1	1.2	1.5	2.5	0.9	2.5	3.4
	5.8	4.2	12.2	6.4	25.0	21.2	16.2	13.3	8.2	11.1	12.1	18.6
	9.4	10.8	9.7	18.1	7.2	4.5	4.9	10.0	15.2	17.6	34.0	31.3
	20.6	26.2	27.8	19.7	24.2	23.0	21.6					
CER	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					

CYP												
37.5	12.5	37.4	19.5	4.4	6.2	14.5	14.5	13.3	15.4	3.3	4.6	
8.2	23.6	22.7	12.5	8.7	5.2	2.9	2.7	2.7	16.8	3.4	6.9	
14.2	21.5	6.7	18.1	2.9	3.5	4.9	3.9	3.3	3.8	2.3	4.5	
14.8	5.7	14.2	23.3	4.6	11.7	6.4	8.6	27.5	8.9	5.1	7.3	
18.8	19.0	6.9	12.9	42.6	45.9	12.1	11.1	8.8	8.6	7.3	5.6	
4.1	2.0	4.8	7.1	5.6	16.7	43.1						
RUD												
4.2	3.0	7.6	1.0	1.4	2.1	4.7	7.7	6.8	4.8	0.5	1.4	
0.5	0.8	1.1	1.1	1.6	1.0	0.1	0.0	0.0	0.4	0.0	0.3	
0.0	0.1	0.9	0.3	1.0	0.5	0.1	0.2	0.3	0.7	0.8	1.7	
4.1	2.3	6.7	4.2	0.0	0.5	2.7	2.0	2.8	3.3	2.2	2.1	
0.0	0.1	0.0	0.7	3.8	0.6	0.2	0.5	0.3	0.4	0.2	0.1	
0.4	0.2	2.7	0.6	0.8	0.7	2.2						
RDS												
0.2	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.1	0.0	0.1	0.2	
0.3	0.0	0.0	0.0	0.4	0.1	0.1	0.4	9001.0	0.0	0.1	0.3	
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.3	
0.0	0.0	9001.0	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	
0.2	0.4	0.5	0.5	1.5	0.6	0.7						
PDT												
0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						
MER												
0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.2	0.1	0.1	0.0	0.2	
0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	
0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	
0.3	0.0	0.0	0.1	0.0	0.0	0.0						
CRUC												
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
0.0	0.1	4.9	0.8	0.0	0.1	1.9	0.8	9001.0	1.3	0.0	0.0	
0.4	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	
0.2	0.0	0.0	0.0	0.1	0.5	0.1						
RUB												
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	9001.0	0.0	0.0	0.0	0.0						
DXA												
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						
DND												
0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						
CAM												
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0						

VAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
FILI	0.6	0.5	0.0	0.7	1.6	0.8	1.7	1.6	0.6	1.7	0.9	0.9
	0.6	0.7	1.6	2.2	1.2	2.2	1.6	0.8	1.7	1.3	0.9	1.1
	1.1	0.6	0.6	1.0	0.8	1.7	0.1	1.9	0.8	1.9	0.8	1.1
	2.1	1.6	3.4	1.8	3.7	1.9	6.6	5.4	7.1	0.0	2.2	2.9
	3.2	1.9	1.7	1.4	2.5	3.2	0.7	2.7	0.8	2.3	3.3	6.2
	8.0	3.8	2.8	10.4	15.1	14.7	8.8					
POLY	0.2	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.3	9001.0	0.2
	0.1	0.1	9001.0	9001.0	0.2	0.3	0.9	0.4	0.1	1.1	0.3	0.3
	0.5	0.2	0.4	0.1	0.2	0.1	0.3	0.4	0.3	0.4	9001.0	0.1
	0.1	0.2	0.3	0.4	0.6	0.1	9001.0	1.0	0.3	1.1	0.5	0.4
	0.6	0.1	0.4	0.1	0.0	0.3	0.4	9001.0	0.0	0.0	0.1	0.0
	9001.0	0.0	9001.0	0.0	0.0	9001.0	0.0					
PTR	0.5	0.0	3.2	1.6	2.5	0.9	2.1	3.1	6.8	4.8	0.0	0.5
	2.0	1.0	0.9	1.1	1.4	1.0	0.3	0.1	0.0	0.0	0.0	9001.0
	0.0	0.4	0.4	0.0	0.5	1.0	0.3	0.0	0.3	1.4	0.1	0.1
	0.2	9001.0	0.5	0.0	0.0	0.1	0.0	1.2	0.7	0.2	0.0	0.2
	1.0	2.9	0.2	0.1	1.8	0.8	0.4	0.3	0.3	0.3	0.1	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
APG	5.9	7.0	12.9	28.8	44.1	42.4	35.7	26.3	36.2	29.8	47.3	41.9
	45.2	33.9	39.5	42.7	49.8	41.0	48.2	41.6	40.8	30.7	41.4	52.0
	39.3	32.4	40.0	41.7	33.5	38.4	37.8	48.7	44.3	50.2	43.5	42.7
	33.7	34.0	37.4	30.8	38.7	28.4	43.8	40.1	33.2	40.9	37.5	37.8
	44.0	36.1	46.0	37.8	24.9	33.2	51.7	38.4	39.3	21.6	16.4	12.1
	20.0	16.2	13.0	16.3	27.5	22.1	14.8					
SPD	1.8	3.7	7.4	18.4	22.8	23.1	22.3	22.8	28.4	23.6	35.7	24.0
	33.6	30.4	24.0	33.8	25.1	44.6	41.2	48.5	45.8	38.1	42.7	30.9
	35.5	32.2	41.0	31.1	36.2	46.7	45.5	32.2	30.3	29.2	39.3	33.6
	30.1	34.0	19.8	17.4	26.9	32.8	26.6	28.4	23.6	30.5	37.2	27.9
	25.2	31.2	29.5	24.9	19.0	14.7	20.2	39.1	34.8	38.0	36.5	41.5
	52.4	50.8	44.6	52.3	37.4	33.9	13.9					
NAP	92.1	89.1	79.6	52.6	32.9	34.3	41.8	50.7	35.3	47.1	16.9	33.9
	21.0	35.6	36.9	23.4	24.9	14.2	10.4	9.8	13.2	31.1	15.7	17.0
	25.1	35.3	18.9	27.0	30.2	14.7	16.5	18.9	26.3	20.0	17.0	24.5
	36.0	26.3	42.1	51.6	34.2	38.6	29.5	31.4	43.1	28.5	25.2	34.2
	30.7	32.6	24.3	37.2	56.0	51.9	27.9	22.3	25.8	39.5	47.0	46.4
	27.4	33.0	42.3	31.3	34.9	43.9	71.2					

DEPTH	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
COUNT								
BET	11.0	18.0	14.0	22.0	24.0	32.0	36.0	31.0
PIN	35.0	31.0	43.0	21.0	23.0	14.0	13.0	13.0
QU	0.0	0.0	1.0	2.0	1.0	0.0	1.0	3.0
ULM	5.0	1.0	2.0	4.0	2.0	4.0	0.0	3.0
FX	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
ALN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
SX	1.0	0.0	1.0	3.0	1.0	3.0	2.0	1.0
CDR	111.0	151.0	116.0	145.0	171.0	171.0	107.0	48.0
HED	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0
IL	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
CALL	1.0	2.0	9001.0	1.0	0.0	0.0	2.0	1.0
GRA	16.0	18.0	12.0	31.0	26.0	34.0	43.0	14.0
CYP	3.0	15.0	26.0	36.0	58.0	91.0	80.0	32.0
RUD	0.0	0.0	1.0	0.0	0.0	1.0	1.0	2.0
RX	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
UMB	0.0	0.0	1.0	0.0	0.0	0.0	1.0	1.0
MEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
ROS	0.0	0.0	0.0	1.0	1.0	0.0	4.0	3.0
RUB	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
CRUC	0.0	9001.0	0.0	0.0	0.0	9001.0	0.0	0.0
TEU	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
RANE	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
RAN	0.0	9001.0	1.0	0.0	0.0	0.0	0.0	1.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
EPIL	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
FIL	0.0	9001.0	2.0	7.0	5.0	6.0	5.0	0.0
SUCC	0.0	1.0	0.0	0.0	2.0	0.0	4.0	0.0
FILI	43.0	48.0	42.0	63.0	77.0	66.0	48.0	40.0
POLY	0.0	0.0	1.0	0.0	0.0	1.0	0.0	4.0
PTR	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
SEL	0.0	0.0	0.0	0.0	2.0	1.0	2.0	0.0
SPH	0.0	5.0	1.0	15.0	0.0	1.0	0.0	0.0

DUFTON MOSS B 1969
 PERCENTAGE OF POLLEN SUM

DEPTHS	38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
PERCENTAGES								
BET	21.5	36.0	23.3	43.1	48.0	64.0	72.0	62.0
PIN	68.6	62.0	71.6	41.1	46.0	28.0	26.0	26.0
QU	0.0	0.0	1.6	3.9	2.0	0.0	2.0	6.0
ULM	9.8	2.0	3.3	7.8	4.0	8.0	0.0	6.0
FX	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
ALN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
SX	1.9	0.0	1.6	5.8	2.0	6.0	4.0	2.0
CDR	217.6	302.0	193.3	284.3	342.0	342.0	214.0	96.0
HED	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0
IL	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
CALL	1.9	4.0	9001.0	1.9	0.0	0.0	4.0	2.0
GRA	31.3	36.0	20.0	60.7	52.0	68.0	86.0	28.0
CYP	5.8	30.0	43.3	70.5	116.0	182.0	160.0	64.0
RUD	0.0	0.0	1.6	0.0	0.0	2.0	2.0	4.0
RCS	0.0	0.0	0.0	1.9	2.0	0.0	8.0	6.0
RUB	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0
CRUC	0.0	9001.0	0.0	0.0	0.0	9001.0	0.0	0.0
TEU	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0
RANE	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
RAN	0.0	9001.0	1.6	0.0	0.0	0.0	0.0	2.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
EPIL	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0
FIL	0.0	9001.0	3.3	13.7	10.0	12.0	10.0	0.0
SUCC	0.0	2.0	0.0	0.0	4.0	0.0	8.0	0.0
FILI	84.3	96.0	70.0	123.5	154.0	132.0	96.0	80.0
PCLY	0.0	0.0	1.6	0.0	0.0	2.0	0.0	8.0
PTR	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0
SEL	0.0	0.0	0.0	0.0	4.0	2.0	4.0	0.0
SPH	11.7	10.0	1.6	29.4	10.0	20.0	10.0	18.0

DUFTON MOSS B 1969
PERCENTAGE OF POLLEN SUM

DEPTHS		38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
PERCENTAGES									
RX		0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
UMB		0.0	0.0	1.6	0.0	0.0	0.0	2.0	2.0
MEL		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0

DUFTON MOSS B 1969
PERCENTAGE OF TOTAL POLLEN

DEPTHS		38.0	39.0	40.0	41.0	42.0	43.0	44.0	45.0
PERCENTAGES									
BET		6.0	7.5	6.6	7.9	7.6	12.4	12.1	20.1
PIN		19.1	13.0	20.2	7.5	7.3	5.4	4.3	8.4
QU		0.0	0.0	0.4	0.7	0.3	0.0	0.3	1.9
ULM		2.7	0.4	0.9	1.4	0.6	1.5	0.0	1.9
FX		0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
ALN		0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
SX		0.5	0.0	0.4	1.0	0.3	1.1	0.6	0.6
COR		60.6	63.7	54.7	52.1	54.4	66.5	36.0	31.1
HED		0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0
IL		0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
CALL		0.5	0.8	9001.0	0.3	0.0	0.0	0.6	0.6
GRA		8.7	7.5	5.6	11.1	8.2	13.2	14.4	9.0
CYP		1.6	6.3	12.2	12.9	18.4	35.4	26.9	20.7
RUD		0.0	0.0	0.4	0.0	0.0	0.3	0.3	1.2
RCS		0.0	0.0	0.0	0.3	0.3	0.0	1.3	1.9
RUB		0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
CRUC		0.0	9001.0	0.0	0.0	0.0	9001.0	0.0	0.0
TEU		0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
RANE		0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
RAN		0.0	9001.0	0.4	0.0	0.0	0.0	0.0	0.6

ST	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
EPIL	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.6
FIL	0.0	9001.0	0.9	2.5	1.5	2.3	1.6	0.0
SUCC	0.0	0.4	0.0	0.0	0.6	0.0	1.3	0.0
FILI	23.4	20.2	19.8	22.6	24.5	25.6	16.1	25.9
POLY	0.0	0.0	0.4	0.0	0.0	0.3	0.0	2.5
PTR	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
SEL	0.0	0.0	0.0	0.0	0.6	0.3	0.6	0.0
SPH	3.2	2.1	0.4	5.3	1.5	3.8	1.6	5.8
ANA SPO	27.8	21.0	28.3	20.5	15.9	19.4	16.8	33.7
DBO NAP	61.2	63.7	55.1	53.2	54.7	67.7	36.7	31.1
NAR APO	10.9	15.1	19.8	28.4	29.2	51.7	46.4	35.0

DUFTON MOSS C 1969
PERCENTAGE OF POLLEN SUM

DEPTHS	6.0	11.0	14.0	15.0	16.0	18.0	19.0	20.0	25.0	30.0
PERCENTAGES										
BET	81.8	60.7	59.6	98.2	61.4	75.9	70.4	67.0	79.3	62.7
PI	18.1	39.2	39.9	1.6	37.8	22.9	27.8	31.9	20.6	34.8
QU	0.0	0.0	0.4	0.0	0.6	1.0	1.6	1.0	0.0	2.3
SX	24.6	25.9	14.7	2.5	42.5	24.0	45.0	50.5	518.9	383.7
COR	92.2	86.1	21.1	1.8	10.8	11.4	13.1	36.0	36.2	76.7
ERIC	2.5	0.5	0.4	0.1	1.3	0.5	9001.0	1.0	0.0	4.6
CRA	18.1	22.0	11.8	1.4	41.8	25.1	32.7	30.9	6.8	39.5
CYP	18.1	60.2	97.0	3.4	83.7	102.7	167.2	309.2	156.8	360.4
RUD	1.2	1.6	1.4	0.2	16.2	12.0	14.7	9.2	6.8	27.9
RDS	3.8	2.7	4.9	0.5	8.1	10.3	7.3	8.2	15.5	41.8
CRUC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.4	0.0
VIC	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
PAP	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
RANE	0.0	0.0	0.0	0.0	0.6	0.0	0.0	1.0	3.4	2.3
RAN	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
FIL	15.5	7.7	11.3	1.0	18.2	11.4	13.9	11.3	22.4	55.8
CAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0
POTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
MYR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
FILI	19.4	37.5	15.2	4.0	76.3	26.7	73.7	42.2	31.0	332.5
PCLY	0.0	0.0	0.0	0.0	0.6	1.0	0.8	0.0	0.0	2.3
SPH	3.8	9.9	2.4	0.1	6.7	1.6	4.0	3.0	1.7	11.6

DUFTON MOSS C 1969
PERCENTAGE OF POLLEN SUM

DEPTHS	6.0	11.0	14.0	15.0	16.0	18.0	19.0	20.0	25.0	30.0
PERCENTAGES										
PRK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
RK	0.0	0.5	0.0	0.0	1.5	0.5	0.0	1.0	0.0	0.0

COT	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
COL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
UMS	1.2	1.1	1.4	0.1	14.0	6.5	13.1	7.2	6.7	23.7
CHI	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
REL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0

DUFTON MOSS C 1969
PERCENTAGE OF TOTAL POLLEN

DEPTH	6.0	11.0	14.0	15.0	16.0	18.0	19.0	20.0	25.0	30.0
PERCENTAGES										
BET	28.2	19.7	22.6	88.2	18.9	25.8	17.7	12.1	9.1	5.7
PI	6.2	12.7	15.1	1.4	11.6	7.8	7.0	5.8	2.3	3.1
QU	0.0	0.0	0.1	0.0	0.2	0.3	0.4	0.1	0.0	0.2
SX	8.5	8.4	5.6	2.2	13.1	8.1	11.3	9.1	59.6	34.8
CDR	31.8	28.0	8.0	1.6	3.3	3.9	3.2	6.5	4.1	6.9
ERIC	0.8	0.1	0.1	0.1	0.4	0.1	1855.8	0.1	0.0	0.4
GRA	6.2	7.1	4.4	1.3	12.9	8.5	8.2	5.6	0.7	3.5
CYP	6.2	19.6	36.8	3.0	25.8	35.0	42.0	56.1	18.0	32.7
RUD	0.4	0.5	0.5	0.2	5.0	4.0	3.7	1.6	0.7	2.5
RDS	1.3	0.8	1.8	0.5	2.5	3.5	1.8	1.4	1.7	3.8
CRUC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0
VIC	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
LEG	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
RANE	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.3	0.2
RAN	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1685.5	0.0	0.0
FIL	5.3	2.5	4.3	0.9	5.6	3.9	3.5	2.0	2.5	5.0
CAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
POTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
MYR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
FILI	6.7	12.2	5.8	3.6	23.5	9.1	18.5	7.6	3.5	30.2
POLY	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.0	0.0	0.2
SPH	1.3	3.2	0.9	0.1	2.0	0.5	1.0	0.5	0.1	1.0
APO	34.5	32.5	38.0	89.7	30.8	34.0	25.1	18.1	11.4	9.0
SPO	40.3	36.5	13.6	4.0	16.4	12.1	14.6	15.7	65.7	41.8
NAP	25.1	30.9	48.3	6.1	52.7	53.4	60.2	66.1	24.7	49.0

CRONKLEY PASTURES 1967
POLLEN GRAINS COUNTED

DEPTHS	0.0	6.0	18.0	26.0	36.0	46.0	56.0	66.0	76.0	80.0	90.0	106.0
	116.0	126.0	136.0	146.0	156.0	166.0	176.0	186.0	196.0	206.0	216.0	226.0
	236.0	246.0	256.0	261.0	266.0	271.0	276.0	281.0	295.0			
COUNT												
BET	12.0	6.0	2.0	11.0	3.0	7.0	39.0	48.0	6.0	7.0	22.0	16.0
	6.0	14.0	22.0	5.0	7.0	7.0	3.0	12.0	28.0	20.0	23.0	14.0
	13.0	4.0	3.0	6.0	5.0	10.0	15.0	38.0	9.0			
PIN	0.0	4.0	1.0	2.0	3.0	2.0	1.0	4.0	1.0	3.0	2.0	1.0
	1.0	2.0	2.0	2.0	4.0	11.0	9.0	4.0	5.0	4.0	3.0	11.0
9001.0	3.0	3.0	1.0	3.0	2.0	6.0	8.0	1.0				
QU	30.0	47.0	31.0	60.0	58.0	106.0	62.0	57.0	47.0	36.0	87.0	113.0
	56.0	76.0	76.0	87.0	80.0	72.0	76.0	81.0	73.0	89.0	56.0	49.0
	57.0	44.0	31.0	5.0	47.0	34.0	52.0	51.0	76.0			
ULM	1.0	3.0	1.0	1.0	0.0	1.0	3.0	3.0	0.0	0.0	2.0	3.0
	2.0	0.0	1.0	2.0	8.0	5.0	3.0	3.0	1.0	2.0	1.0	4.0
	5.0	1.0	0.0	0.0	2.0	1.0	4.0	5.0	14.0			
TIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FA	1.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FX	9.0	12.0	8.0	13.0	1.0	5.0	21.0	23.0	6.0	9.0	12.0	10.0
	6.0	17.0	21.0	8.0	11.0	14.0	14.0	17.0	11.0	26.0	6.0	8.0
	8.0	6.0	7.0	3.0	6.0	6.0	6.0	11.0	3.0			
ALN	11.0	2.0	9.0	7.0	7.0	6.0	20.0	27.0	19.0	9.0	24.0	40.0
	7.0	42.0	83.0	55.0	90.0	30.0	69.0	82.0	92.0	65.0	122.0	120.0
	179.0	150.0	12.0	1.0	33.0	47.0	119.0	87.0	113.0			
SX	1.0	0.0	0.0	0.0	0.0	2.0	1.0	2.0	0.0	0.0	1.0	2.0
	0.0	1.0	1.0	0.0	0.0	1.0	0.0	3.0	0.0	0.0	2.0	0.0
	0.0	1.0	3.0	0.0	1.0	1.0	2.0	6.0	3.0			
CDR	38.0	38.0	76.0	53.0	39.0	31.0	175.0	176.0	65.0	63.0	126.0	109.0
	36.0	51.0	108.0	61.0	73.0	84.0	81.0	105.0	122.0	80.0	61.0	79.0
	80.0	85.0	71.0	8.0	93.0	81.0	118.0	133.0	110.0			
HED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ACE	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ERI	97.0	421.0	35.0	29.0	45.0	20.0	5.0	4.0	10.0	3.0	9.0	17.0
	3.0	3.0	1.0	4.0	3.0	5.0	1.0	2.0	4.0	2.0	2.0	9001.0
	1.0	3.0	95.0	14.0	55.0	41.0	15.0	18.0	3.0			
GRA	305.0	220.0	193.0	298.0	193.0	202.0	135.0	149.0	119.0	75.0	156.0	241.0
	73.0	163.0	211.0	248.0	214.0	153.0	248.0	199.0	78.0	135.0	167.0	261.0
	173.0	159.0	297.0	40.0	383.0	119.0	150.0	139.0	195.0			

CEK												
9001.0	1.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CYP												
370.0	207.0	350.0	540.0	651.0	361.0	426.0	344.0	753.0	749.0	431.0	375.0	
213.0	200.0	103.0	322.0	149.0	206.0	415.0	334.0	26.0	41.0	34.0	23.0	
11.0	5.0	368.0	187.0	552.0	350.0	157.0	219.0	28.0				
RUD												
28.0	35.0	23.0	11.0	16.0	31.0	15.0	23.0	11.0	9.0	10.0	17.0	
10.0	17.0	14.0	15.0	11.0	6.0	5.0	10.0	6.0	5.0	6.0	8.0	
13.0	8.0	29.0	10.0	31.0	10.0	8.0	7.0	6.0				
PLA												
10.0	22.0	8.0	5.0	7.0	31.0	4.0	4.0	4.0	4.0	3.0	4.0	
1.0	3.0	4.0	6.0	3.0	1.0	0.0	1.0	3.0	2.0	1.0	1.0	
1.0	0.0	18.0	6.0	15.0	8.0	1.0	4.0	1.0				
PMM												
2.0	0.0	0.0	3.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	1.0	
0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	1.0	0.0	9001.0	0.0				
RX												
1.0	2.0	0.0	0.0	1.0	4.0	3.0	6.0	2.0	1.0	2.0	3.0	
2.0	2.0	4.0	2.0	2.0	0.0	1.0	5.0	1.0	3.0	4.0	4.0	
11.0	5.0	2.0	2.0	3.0	0.0	3.0	0.0	4.0				
ART												
0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0				
CCT												
4.0	5.0	1.0	0.0	1.0	0.0	1.0	2.0	0.0	0.0	0.0	1.0	
1.0	3.0	2.0	2.0	9001.0	9001.0	9001.0	9001.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0				
CCL												
8.0	1.0	13.0	8.0	5.0	2.0	0.0	0.0	0.0	3.0	0.0	0.0	
1.0	1.0	1.0	0.0	0.0	2.0	0.0	1.0	0.0	0.0	0.0	1.0	
1.0	1.0	3.0	0.0	7.0	0.0	3.0	1.0	0.0				
UMB												
1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	9001.0	1.0	0.0	7.0	
4.0	6.0	1.0	2.0	9001.0	0.0	3.0	0.0	0.0	0.0	1.0	0.0	
0.0	1.0	3.0	0.0	2.0	0.0	0.0	1.0	1.0				
MEL												
0.0	1.0	0.0	0.0	1.0	0.0	2.0	2.0	2.0	0.0	2.0	1.0	
1.0	1.0	0.0	1.0	3.0	2.0	1.0	3.0	0.0	0.0	0.0	4.0	
1.0	1.0	2.0	0.0	0.0	0.0	1.0	0.0	0.0				
CHE												
0.0	2.0	0.0	1.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	9001.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0				
RCS												
8.0	9.0	3.0	6.0	5.0	4.0	2.0	1.0	4.0	3.0	3.0	2.0	
1.0	1.0	5.0	4.0	5.0	2.0	0.0	1.0	2.0	0.0	1.0	4.0	
1.0	1.0	6.0	4.0	3.0	6.0	2.0	9001.0	1.0				
PCT												
4.0	1.0	5.0	9001.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	
2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	0.0	1.0	0.0	
2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0				
HEL												
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0				
0.0	2.0	1.0	4.0	0.0	3.0	1.0	6.0	6.0	3.0	9001.0	0.0	
0.0	9001.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	9001.0	0.0	9001.0	1.0	0.0	0.0	0.0				
0.0	1.0	1.0	9001.0	0.0	3.0	1.0	2.0	1.0	1.0	1.0	0.0	
0.0	0.0	2.0	5.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	1.0	2.0	1.0	0.0	0.0	0.0				

UNGS	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	4.0	0.0
9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
RAN	1.0	2.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	3.0
	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0			
CARY	9001.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	1.0	0.0	2.0	1.0	0.0	1.0	0.0	9001.0	0.0	0.0
	0.0	0.0	0.0	2.0	1.0	2.0	2.0	1.0	0.0			
FIL	1.0	8.0	1.0	9001.0	9001.0	1.0	3.0	2.0	2.0	2.0	3.0	3.0
	2.0	5.0	5.0	8.0	7.0	3.0	7.0	17.0	6.0	6.0	13.0	13.0
	37.0	16.0	1.0	0.0	3.0	4.0	4.0	4.0	2.0			
SUCC	0.0	0.0	5.0	3.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.0	0.0	2.0	1.0	3.0	0.0	0.0	1.0	1.0			
THA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0			
NAR	0.0	0.0	2.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0			
PCB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.0	0.0	0.0	0.0	0.0	2.0	9001.0	1.0	0.0			
VAL	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
POTA	2.0	2.0	0.0	1.0	2.0	0.0	26.0	22.0	3.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	2.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
SPA	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FILI	10.0	11.0	9.0	19.0	31.0	16.0	24.0	14.0	21.0	32.0	41.0	48.0
	35.0	75.0	86.0	136.0	304.0	371.0	65.0	151.0	24.0	66.0	46.0	46.0
	34.0	57.0	46.0	9.0	78.0	28.0	105.0	128.0	57.0			
PCLY	0.0	0.0	9001.0	2.0	2.0	1.0	9001.0	1.0	4.0	1.0	3.0	9001.0
	0.0	9001.0	2.0	3.0	3.0	1.0	2.0	8.0	3.0	7.0	2.0	12.0
	7.0	8.0	1.0	5.0	3.0	2.0	4.0	2.0	3.0			
PTR	4.0	16.0	10.0	3.0	13.0	15.0	11.0	2.0	14.0	11.0	6.0	8.0
	6.0	13.0	11.0	4.0	9.0	3.0	2.0	5.0	5.0	0.0	0.0	1.0
	0.0	1.0	10.0	5.0	19.0	4.0	4.0	7.0	9.0			
SEL	1.0	1.0	3.0	4.0	20.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	0.0	0.0	11.0	10.0	9001.0	42.0	0.0	0.0	0.0			
SPH	55.0	47.0	289.0	12.0	52.0	5.0	5.0	9.0	11.0	7.0	37.0	7.0
	1.0	1.0	7.0	3.0	5.0	1.0	1.0	5.0	2.0	4.0	4.0	0.0
	0.0	6.0	8.0	43.0	13.0	13.0	27.0	23.0	7.0			

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DEPTHS												
	0.0	6.0	16.0	26.0	36.0	46.0	56.0	66.0	76.0	80.0	96.0	106.0
	116.0	126.0	136.0	146.0	156.0	166.0	176.0	186.0	196.0	206.0	216.0	226.0
	236.0	246.0	256.0	261.0	266.0	271.0	276.0	281.0	295.0			
PERCENTAGES												
BET												
	22.6	8.3	4.6	12.6	4.6	5.7	30.9	35.5	10.0	12.7	17.6	11.1
	8.3	12.8	18.0	4.4	6.3	6.0	2.6	10.1	23.7	14.0	25.8	16.2
	20.4	6.8	6.8	40.0	7.9	15.6	18.0	30.6	8.0			
PIN												
	0.0	5.5	2.3	2.2	4.6	1.6	0.7	2.9	1.6	5.4	1.6	0.6
	1.3	1.8	1.6	1.7	3.6	9.5	6.5	3.3	4.2	2.8	3.3	12.7
	9001.0	5.1	6.8	6.6	4.7	3.1	7.2	6.4	0.9			
QU												
	56.6	65.2	72.0	68.9	69.2	87.6	49.2	42.2	78.3	65.4	69.6	79.0
	77.7	69.7	62.2	77.6	72.6	62.6	72.3	68.6	61.3	62.6	62.9	56.9
	64.7	75.8	70.4	33.3	74.6	55.1	62.6	41.1	73.0			
ULM												
	1.8	4.1	2.3	1.1	0.0	0.8	2.3	2.2	0.0	0.0	1.6	2.0
	2.7	0.0	0.8	1.7	7.2	4.3	2.8	2.5	0.6	1.4	1.1	4.6
	5.6	1.7	0.0	0.0	3.1	1.5	4.6	4.0	13.4			
TIL												
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.7	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FA												
	1.8	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.3	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FX												
	16.9	16.6	18.6	14.9	1.5	4.1	16.6	17.0	10.0	16.3	7.6	6.9
	8.3	15.5	17.2	7.1	9.9	12.1	13.3	14.4	9.3	18.3	6.7	9.3
	9.0	10.3	15.9	20.0	9.5	9.3	7.2	8.8	2.8			
ALN												
	20.7	2.7	20.9	8.0	10.7	4.9	15.8	20.0	31.6	16.3	19.2	27.9
	9.7	38.5	68.0	49.1	81.0	26.0	65.7	69.4	77.9	45.7	137.0	139.5
	203.4	258.6	27.2	6.6	52.3	73.4	143.3	70.1	108.6			
SX												
	1.8	0.0	0.0	0.0	0.0	1.6	0.7	1.4	0.0	0.0	0.8	1.3
	0.0	0.9	0.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0	2.2	0.0
	0.0	1.7	6.8	0.0	1.5	1.5	2.4	4.6	2.8			
COR												
	71.6	52.7	176.7	60.9	60.0	25.6	138.8	130.3	106.3	114.5	100.8	76.2
	50.0	46.7	88.5	54.4	65.7	73.0	77.1	88.9	108.4	56.3	68.5	91.8
	90.9	146.5	161.3	53.3	147.6	126.5	142.1	107.2	105.7			
HED												
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ACC												
	1.8	0.0	2.3	0.0	0.0	0.0	0.0	0.7	0.0	1.8	0.0	0.0
	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ERI												
	183.0	584.7	81.3	33.3	69.2	16.5	3.9	2.9	16.6	5.4	7.2	11.8
	4.1	2.7	0.8	3.5	2.7	4.3	0.9	1.6	3.3	1.4	2.2	9001.0
	1.1	5.1	215.9	93.3	87.3	64.0	18.0	14.5	2.8			
GRA												
	575.4	305.5	448.8	342.5	296.9	166.9	107.1	110.3	198.3	136.3	124.8	168.5
	101.3	149.5	172.9	221.4	192.7	133.0	236.1	168.6	66.1	95.0	187.6	303.4
	196.5	274.1	675.0	266.6	607.9	183.9	180.7	112.0	187.5			

PCTA	3.7	2.7	0.0	1.1	3.0	0.0	20.0	16.2	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	1.6	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
SPA	0.0	0.0	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FILI	18.8	15.2	20.9	21.8	47.6	13.2	19.0	10.3	35.0	58.1	32.8	33.5
	48.6	68.8	70.4	121.4	273.8	322.6	61.9	127.9	20.3	46.4	51.6	53.4
	38.6	98.2	104.5	60.0	123.8	43.7	131.3	103.2	54.8			
PGLY	0.0	0.0	9001.0	2.2	3.0	0.8	9001.0	0.7	6.6	1.8	2.4	9001.0
	0.0	9001.0	1.6	2.6	2.7	0.8	1.9	6.7	2.5	4.9	2.2	13.9
	7.9	13.7	2.2	33.3	4.7	3.1	4.8	1.6	2.8			
PTR	7.5	22.2	23.2	3.4	20.0	12.3	8.7	1.4	23.3	20.0	4.8	5.5
	8.3	11.9	9.0	3.5	8.1	2.6	1.9	4.2	4.2	0.0	0.0	1.1
	0.0	1.7	22.7	33.3	30.1	6.2	4.8	5.6	8.6			
SEL	1.8	1.3	6.9	4.3	30.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
	0.0	0.0	25.0	66.6	9001.0	65.6	0.0	0.0	0.0			
SPH	103.7	65.2	672.0	13.7	80.0	4.1	3.9	6.6	18.3	12.7	69.6	4.8
	1.3	0.9	5.7	2.6	4.3	10.8	0.9	4.2	1.6	2.8	4.4	0.0
	0.0	10.3	12.1	206.6	30.0	20.3	32.5	18.5	6.7			

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DEPTHS	0.0	6.0	16.0	26.0	36.0	46.0	56.0	66.0	76.0	80.0	96.0	106.0
	116.0	126.0	136.0	146.0	156.0	166.0	176.0	186.0	196.0	206.0	216.0	226.0
	236.0	246.0	256.0	261.0	266.0	271.0	276.0	281.0	295.0			
PERCENTAGES												
PLA	18.8	30.5	18.6	5.7	10.7	25.6	3.1	2.9	6.6	7.2	2.4	2.7
	1.3	2.7	3.2	5.3	2.7	0.8	0.0	0.8	2.5	1.4	1.1	1.1
	1.1	0.0	40.9	40.0	23.8	12.5	1.2	3.2	0.9			
PMM	3.7	0.0	0.0	3.4	0.0	0.8	0.7	0.0	1.6	0.0	0.0	0.6
	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	1.5	0.0	9001.0	0.0			
RX	1.8	2.7	0.0	0.0	1.5	3.3	2.3	4.4	3.3	1.8	1.6	2.0
	2.7	1.8	3.2	1.7	1.8	0.0	0.9	4.2	0.8	2.1	4.4	4.6
	12.5	8.6	4.5	13.3	4.7	0.0	3.6	0.0	3.8			
ART	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	2.2	0.0	0.0	1.5	0.0	0.0	0.0			
COT	7.5	6.9	2.3	0.0	1.5	0.0	0.7	1.4	0.0	0.0	0.0	0.6
	1.3	2.7	1.6	1.7	9001.0	9001.0	9001.0	9001.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0			
COL	15.0	1.3	30.2	9.1	7.6	1.6	0.0	0.0	0.0	5.4	0.0	0.0
	1.3	0.9	0.8	0.0	0.0	1.7	0.0	0.8	0.0	0.0	0.0	1.1
	1.1	1.7	6.8	0.0	11.1	0.0	3.6	0.8	0.0			

FX	0.9	1.1	1.1	1.2	0.0	0.6	2.2	2.5	0.5	0.9	1.3	1.0
	1.4	2.8	3.1	0.9	1.6	2.2	1.4	1.9	2.3	4.7	1.1	1.3
	1.3	1.2	0.7	1.0	0.4	0.8	0.9	1.5	0.5			
ALN	1.1	0.1	1.2	0.6	0.6	0.7	2.1	2.9	1.8	0.9	2.6	4.1
	1.6	7.0	12.5	6.5	13.3	4.9	7.3	9.4	19.8	11.9	24.3	20.2
	30.4	30.8	1.2	0.3	2.7	6.3	17.9	11.8	19.9			
SX	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.1	0.2
	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0
	0.0	0.2	0.3	0.0	0.0	0.1	0.3	0.8	0.5			
CCR	4.1	3.7	10.9	5.0	3.8	3.8	18.6	19.4	6.1	6.4	14.1	11.4
	8.5	8.5	16.3	7.3	10.7	13.7	8.6	12.0	27.5	14.6	12.1	13.2
	13.6	17.4	7.6	2.8	7.6	10.8	17.8	18.1	19.4			
HED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ACE	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
ERI	10.5	41.2	5.0	2.7	4.3	2.5	0.5	0.4	0.9	0.3	1.0	1.7
	0.7	0.5	0.1	0.4	0.4	0.8	0.1	0.2	0.8	0.3	0.3	9001.0
	0.1	0.6	10.2	4.9	4.5	5.4	2.2	2.4	0.5			
GRA	33.0	21.5	27.6	28.3	18.8	25.3	14.3	16.4	11.3	7.7	17.5	25.2
	17.3	27.4	31.9	29.7	31.6	25.1	26.5	22.8	16.8	24.7	33.2	43.9
	29.4	32.7	31.9	14.1	31.6	15.9	22.6	18.9	34.3			
CER	9001.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
CYP	40.0	20.2	50.2	51.3	63.5	45.3	45.3	38.0	71.6	77.2	48.4	39.3
	50.7	33.6	15.6	38.5	22.0	33.8	44.4	38.3	5.6	7.5	6.7	3.8
	1.8	1.0	39.5	66.0	45.5	46.9	23.7	29.9	4.9			
RUC	3.0	3.4	3.2	1.8	1.5	4.8	1.5	2.5	1.0	0.9	1.1	1.7
	2.3	2.8	2.1	1.7	1.6	0.9	0.5	1.1	1.2	0.9	1.1	1.3
	2.2	1.6	3.1	3.5	2.5	1.3	1.2	0.9	1.0			
RCS	0.8	0.8	0.4	0.5	0.4	0.5	0.2	0.1	0.3	0.3	0.3	0.2
	0.2	0.1	0.7	0.4	0.7	0.3	0.0	0.1	0.4	0.0	0.1	0.6
	0.1	0.2	0.6	1.4	0.2	0.8	0.3	9001.0	0.1			
PCT	0.4	0.0	0.7	9001.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0
	0.4	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.0	0.1	0.0
	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1			
HEL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0			
RUB	0.2	0.1	0.1	0.3	0.0	0.3	0.1	0.6	0.5	0.3	9001.0	0.0
	0.0	9001.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	9001.0	0.0	9001.0	0.1	0.0	0.0	0.0			
CRUC	0.0	0.0	0.1	9001.0	0.0	0.3	0.1	0.2	0.0	0.1	0.1	0.2
	0.0	0.0	0.3	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.0			
CNCB	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.7	0.0
	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

RAN	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0			
CARY	9001.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.0	9001.0	0.0	0.0
	0.0	0.0	0.0	0.7	0.0	0.2	0.3	0.1	0.0			
FIL	0.1	0.7	0.1	9001.0	9001.0	0.1	0.3	0.2	0.1	0.2	0.3	0.3
	0.4	0.8	0.7	0.9	1.0	0.4	0.7	1.9	1.2	1.1	2.5	2.1
	6.3	3.2	0.1	0.0	0.2	0.5	0.6	0.5	0.3			
SUCC	0.0	0.0	0.7	0.2	9001.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.0	0.2	0.3	0.2	0.0	0.0	0.1	0.1			
THA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9001.0	0.0			
NAR	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0			
PCB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.0	0.0	0.0	0.0	0.2	9001.0	0.1	0.0			
VAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
PGTA	0.2	0.1	0.0	0.0	0.1	0.0	2.7	2.4	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.4	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
SPA	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
FILI	1.0	1.0	1.2	1.8	3.0	2.0	2.5	1.5	1.9	3.2	4.6	5.0
	8.3	12.6	13.0	16.2	44.9	60.9	6.9	17.3	5.1	12.1	9.1	7.7
	5.7	11.7	4.9	3.1	6.4	3.7	16.4	17.4	10.0			
PCLY	0.0	0.0	9001.0	0.1	0.1	0.1	9001.0	0.1	0.3	0.1	0.3	9001.0
	0.0	9001.0	0.3	0.3	0.4	0.1	0.2	0.9	0.6	1.2	0.3	2.0
	1.1	1.6	0.1	1.7	0.2	0.2	0.6	0.2	0.5			
PTR	0.4	1.5	1.4	0.2	1.2	1.8	1.1	0.2	1.3	1.1	0.6	0.8
	1.4	2.1	1.6	0.4	1.3	0.4	0.2	0.5	1.0	0.0	0.0	0.1
	0.0	0.2	1.0	1.7	1.5	0.5	0.6	0.9	1.5			
SEL	0.1	0.0	0.4	0.3	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	0.0	0.0	1.1	3.5	9001.0	5.6	0.0	0.0	0.0			
SPH	5.9	4.6	41.4	1.1	5.0	0.6	0.5	0.9	1.0	0.7	9.7	0.7
	0.2	0.1	1.0	0.3	0.7	0.1	0.1	0.5	0.4	0.7	0.7	0.0
	0.0	1.2	0.8	15.1	1.0	1.7	4.0	3.1	1.2			
APC	6.9	7.2	7.4	8.9	7.0	15.9	15.5	17.9	7.5	6.5	16.7	19.1
	18.8	25.4	31.0	12.8	29.7	23.8	18.6	22.9	45.2	37.9	42.0	34.6
	45.4	42.7	6.0	5.6	7.1	14.2	30.5	27.4	38.2			
SPC	4.3	3.7	3.8	5.0	3.8	4.1	18.7	19.8	6.1	6.5	14.2	11.6
	8.5	8.7	16.5	7.3	12.7	13.9	8.6	12.0	27.5	14.6	12.5	13.2
	13.6	17.6	7.9	2.8	7.7	10.9	18.2	18.9	19.9			
NAP	88.6	89.0	88.6	86.0	89.1	79.8	65.7	62.3	86.2	87.1	68.9	69.1
	72.6	65.8	52.4	72.6	58.1	62.2	72.6	64.9	27.1	47.3	45.4	52.0
	40.8	39.5	86.0	91.5	85.1	74.7	51.2	53.5	49.0			

CRONKLEY PASTURES B 1968
 PCLLEN GRAINS CCUNTED

DEPTH	15.0	20.0	25.0	30.0	35.0	40.0
DEPTHS						
15.0	20.0	25.0	30.0	35.0	40.0	
COUNT						
BET	31.0	45.0	25.0	20.0	26.0	27.0
PIN	8.0	7.0	17.0	10.0	17.0	10.0
QU	53.0	25.0	48.0	35.0	58.0	41.0
ULM	5.0	7.0	6.0	10.0	7.0	9.0
TIL	0.0	1.0	9001.0	0.0	0.0	1.0
FX	6.0	11.0	4.0	3.0	3.0	6.0
ALN	135.0	128.0	169.0	139.0	103.0	116.0
SX	4.0	6.0	1.0	2.0	3.0	2.0
CCR	105.0	87.0	131.0	126.0	108.0	106.0
SCR	0.0	0.0	0.0	0.0	1.0	0.0
ERI	6.0	0.0	5.0	6.0	3.0	4.0
GRA	110.0	88.0	98.0	77.0	44.0	99.0
CYP	190.0	150.0	129.0	87.0	136.0	158.0
RUD	6.0	6.0	3.0	2.0	3.0	5.0
PLA	1.0	3.0	1.0	0.0	0.0	1.0
RX	0.0	1.0	0.0	0.0	0.0	0.0
CCT	9001.0	0.0	1.0	0.0	1.0	1.0
CCL	0.0	2.0	0.0	0.0	0.0	9001.0
UMB	4.0	0.0	1.0	2.0	1.0	3.0
MEL	1.0	0.0	0.0	0.0	1.0	0.0
RCS	0.0	0.0	0.0	0.0	0.0	0.0
HEL	3.0	5.0	6.0	2.0	3.0	9.0
RUB	0.0	0.0	0.0	0.0	1.0	0.0
MER	1.0	0.0	0.0	1.0	0.0	3.0
CRUC	1.0	3.0	2.0	0.0	1.0	6.0
SPER	1.0	2.0	1.0	1.0	2.0	1.0
SAX	0.0	0.0	0.0	1.0	0.0	0.0
RANE	0.0	0.0	0.0	0.0	1.0	0.0
RAN	0.0	0.0	0.0	0.0	0.0	3.0
CARY	1.0	6.0	7.0	0.0	1.0	4.0
FIL	0.0	1.0	2.0	0.0	0.0	2.0

SUCU	0.0	12.0	23.0	11.0	29.0	0.0
THA	0.0	0.0	0.0	0.0	1.0	0.0
FILI	1.0	0.0	0.0	0.0	0.0	1.0
PCLY	147.0	130.0	146.0	161.0	156.0	107.0
PTR	10.0	11.0	10.0	16.0	5.0	11.0
SPH	18.0	12.0	6.0	8.0	14.0	11.0

CRONKLEY PASTURES B 1968
PERCENTAGE OF POLLEN SUM

DEPTHS						
	15.0	20.0	25.0	30.0	35.0	40.0
PERCENTAGES						
BET	30.0	46.8	25.0	25.6	21.4	28.7
PIN	7.7	7.2	17.0	12.8	14.0	10.6
CU	51.4	26.0	48.0	44.8	47.9	43.6
ULM	4.8	7.2	6.0	12.8	5.7	9.5
TLE	0.0	1.0	9001.0	0.0	0.0	1.0
FX	5.8	11.4	4.0	3.8	2.4	0.3
ALN	131.0	133.3	169.0	178.2	85.1	123.4
SX	3.8	6.2	1.0	2.5	2.4	2.1
CCR	101.9	90.6	131.0	161.5	89.2	112.7
SGR	0.0	0.0	0.0	0.0	0.8	0.0
ERI	5.8	0.0	5.0	7.6	2.4	4.2
GRA	106.7	91.6	98.0	98.7	36.3	105.3
CYP	184.4	156.2	129.0	111.5	112.3	168.0
RUD	5.8	6.2	3.0	2.5	2.4	5.3
RGS	2.9	5.2	6.0	2.5	2.4	9.5
HEL	0.0	0.0	0.0	0.0	0.8	0.0
RUB	0.9	0.0	0.0	1.2	0.0	3.1
MER	0.9	3.1	2.0	0.0	0.8	6.3
CRUC	0.9	2.0	1.0	1.2	1.6	1.0
SPER	0.0	0.0	0.0	1.2	0.0	0.0
SAX	0.0	0.0	0.0	0.0	0.8	0.0
RANE	0.0	0.0	0.0	0.0	0.0	3.1
RAN	0.9	6.2	7.0	0.0	0.8	4.2
CARY	0.0	1.0	2.0	0.0	0.0	2.1
FIL	0.0	12.5	23.0	14.1	23.9	0.0

JUC	0.0	0.0	0.0	0.0	0.8	0.0
THA	0.9	0.0	0.0	0.0	0.0	1.0
FILI	142.7	135.4	146.0	206.4	128.7	113.8
POLY	9.7	11.4	10.0	20.5	4.1	11.7
PTR	17.4	12.5	6.0	10.2	11.5	11.7
SPH	7.7	6.2	6.0	7.6	2.4	3.1

CRONKLEY PASTURES B 1968
PERCENTAGE OF POLLEN SUM

DEPTHS	15.0	20.0	25.0	30.0	35.0	40.0
PERCENTAGES						
PLA	0.9	3.1	1.0	0.0	0.0	1.0
RX	0.0	1.0	0.0	0.0	0.0	0.0
CGT	9001.0	0.0	1.0	0.0	0.8	1.0
CGL	0.0	2.0	0.0	0.0	0.0	9001.0
UMB	3.8	0.0	1.0	2.5	0.8	3.1
MEL	0.9	0.0	0.0	0.0	0.8	0.0

CRONKLEY PASTURES B 1968
PERCENTAGE OF TOTAL POLLEN

DEPTHS	15.0	20.0	25.0	30.0	35.0	40.0
PERCENTAGES						
BET	4.6	7.6	3.6	3.7	4.6	4.4
PIN	1.1	1.1	2.5	1.8	3.0	1.6
QU	7.8	4.2	7.0	6.5	10.3	6.6
UUM	0.7	1.1	0.8	1.8	1.2	1.4
TAM	0.0	0.1	9001.0	0.0	0.0	0.1
FX	0.8	1.8	0.5	0.5	0.5	0.9
ALN	20.0	21.6	24.9	26.0	18.3	18.9
SX	0.5	1.0	0.1	0.3	0.5	0.3
CGR	15.6	14.7	19.3	23.6	19.2	17.2
SOR	0.0	0.0	0.0	0.0	0.1	0.0
ERI	0.8	0.0	0.7	1.1	0.5	0.6
GRA	16.3	14.9	14.4	14.4	7.8	16.1

CYP	28.2	25.4	19.0	16.3	24.2	25.7
RUD	0.8	1.0	0.4	0.3	0.5	0.8
RDS	0.4	0.8	0.8	0.3	0.5	1.4
HEL	0.0	0.0	0.0	0.0	0.1	0.0
RUB	0.1	0.0	0.0	0.1	0.0	0.4
MER	0.1	0.5	0.2	0.0	0.1	0.9
CRUC	0.1	0.3	0.1	0.1	0.3	0.1
SPER	0.0	0.0	0.0	0.1	0.0	0.0
SAX	0.0	0.0	0.0	0.0	0.1	0.0
RANE	0.0	0.0	0.0	0.0	0.0	0.4
RAN	0.1	1.0	1.0	0.0	0.1	0.6
CARY	0.0	0.1	0.2	0.0	0.0	0.3
FIL	0.0	2.0	3.3	2.0	5.1	0.0
SUCC	0.0	0.0	0.0	0.0	0.1	0.0
THA	0.1	0.0	0.0	0.0	0.0	0.1
FILI	21.8	22.0	21.5	30.2	27.8	17.4
PGLY	1.4	1.8	1.4	3.0	0.8	1.7
PTR	2.6	2.0	0.8	1.5	2.4	1.7
SPH	1.1	1.0	0.8	1.1	0.5	0.4
APD	35.4	37.9	39.7	40.7	39.9	34.2
SPO	16.2	15.7	19.4	24.0	19.9	17.6
NAP	49.4	46.4	40.9	35.3	40.2	49.2

PCTA												
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
0.0	0.0	0.0	1.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.7	0.0									
FILI												
7.6	2.5	15.7	2.1	8.9	9.3	6.9	9.6	11.1	8.0	16.4	2.2	
2.4	9.0	14.4	11.7	5.4	5.3	3.8	1.6	6.1	9.3	7.2	6.8	
18.7	20.3	7.2	76.9									
POLY												
2.5	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	1.6	0.0	9001.0	
0.8	9001.0	2.8	1.0	0.9	1.7	1.2	1.6	2.3	0.8	9001.0	3.1	
0.6	1.1	2.1	6.4									
PTR												
10.2	15.0	36.8	23.4	10.7	34.8	60.4	0.0	63.4	58.0	77.6	2.2	
9.0	10.3	14.4	18.0	0.0	0.8	0.0	0.0	3.8	0.0	0.6	0.6	
0.0	0.5	0.7	1.2									
SPH												
100.0	75.0	100.0	446.8	23.2	30.2	188.3	161.2	152.3	929.0	1350.7	307.4	
63.9	90.9	212.5	102.1	57.6	18.7	17.1	33.0	20.0	62.7	62.6	44.0	
13.3	17.9	30.6	1.2									

MIRE HOLES 1968
PERCENTAGE OF POLLEN SUM

DEPTHS												
10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0	110.0	120.0	
130.0	140.0	150.0	160.0	170.0	180.0	185.0	190.0	195.0	200.0	202.0	204.0	
206.0	208.0	210.0	220.0									
PERCENTAGES												
PLA												
43.5	40.0	21.0	17.0	8.9	23.2	23.2	32.2	30.1	17.7	29.8	1.4	
2.4	5.1	0.9	6.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	
0.0	0.0	0.0	0.0									
PMM												
10.2	12.5	10.5	0.0	1.7	20.9	4.6	9.6	19.0	1.6	0.0	0.0	
0.8	1.2	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0									
RX												
7.6	12.5	15.7	10.6	7.1	13.9	9.3	6.4	6.3	1.6	7.4	0.0	
0.0	0.0	1.9	0.0	9001.0	0.8	0.0	1.6	0.0	0.8	0.6	0.6	
2.4	4.7	5.1	0.0									
COT												
7.6	7.5	0.0	2.1	1.7	2.3	0.0	3.2	1.5	1.6	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.6	2.4	
0.6	0.0	0.0	0.0									
COL												
2.5	0.0	0.0	0.0	0.0	2.3	2.3	0.0	1.5	3.2	0.0	1.4	
0.0	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	1.6	0.0	1.2	
1.2	0.0	9001.0	0.0									
ART												
5.1	2.5	0.0	0.0	0.0	2.3	6.9	0.0	1.5	3.2	1.4	0.7	
0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0									
CHE												
0.0	2.5	0.0	2.1	0.0	2.3	0.0	3.2	4.7	0.0	2.9	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	0.0									
UMB												
2.5	5.0	0.0	2.1	1.7	0.0	0.0	3.2	3.1	0.0	1.4	0.0	
0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.8	1.2	0.6	
0.6	0.5	0.0	9001.0									
MEL												
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	
0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.6	0.3	0.0	0.0	0.0	

DEPTHS	35.0	40.0	45.0	50.0	55.0	60.0
COUNT						
BET	84.0	47.0	54.0	52.0	49.0	32.0
PIN	1.0	3.0	5.0	3.0	4.0	2.0
QU	49.0	50.0	49.0	51.0	53.0	73.0
ULM	16.0	12.0	14.0	7.0	5.0	6.0
TIL	1.0	9001.0	0.0	1.0	0.0	9001.0
FA	1.0	0.0	0.0	0.0	0.0	0.0
FX	16.0	8.0	6.0	9.0	15.0	14.0
ALN	77.0	120.0	77.0	125.0	86.0	135.0
SX	1.0	1.0	3.0	3.0	3.0	2.0
COR	99.0	197.0	182.0	233.0	161.0	184.0
HED	0.0	9001.0	0.0	0.0	0.0	0.0
CALL	262.0	356.0	338.0	360.0	238.0	209.0
ERI	4.0	12.0	9.0	6.0	3.0	2.0
GRA	18.0	56.0	38.0	31.0	52.0	28.0
CYP	51.0	37.0	38.0	31.0	52.0	28.0
RUD	3.0	19.0	11.0	14.0	11.0	4.0
PLA	2.0	16.0	6.0	11.0	8.0	3.0
PMM	0.0	0.0	0.0	1.0	0.0	0.0
RX	0.0	0.0	2.0	1.0	0.0	0.0
COT	0.0	0.0	0.0	0.0	1.0	0.0
COL	0.0	1.0	0.0	0.0	0.0	0.0
ART	0.0	1.0	1.0	1.0	2.0	1.0
UMB	1.0	0.0	1.0	0.0	0.0	0.0
CHE	0.0	1.0	1.0	1.0	0.0	0.0
RDS	9001.0	1.0	0.0	1.0	1.0	3.0
MER	1.0	9001.0	2.0	0.0	0.0	0.0
CRUC	0.0	2.0	0.0	0.0	0.0	0.0
RAN	1.0	9001.0	1.0	2.0	1.0	0.0
FIL	3.0	2.0	2.0	3.0	4.0	3.0
SUCC	0.0	1.0	0.0	0.0	0.0	0.0
SPA	0.0	0.0	1.0	0.0	0.0	0.0
FILI	3.0	7.0	8.0	10.0	5.0	4.0

PCLY	0.0	0.0	9001.0	1.0	9001.0	9001.0
PTR	0.0	22.0	11.0	13.0	8.0	8.0
SPH	1033.0	403.0	358.0	218.0	1541.0	760.0

BLACK BAND 1968
PERCENTAGE OF POLLEN SUM

DEPTHS	35.0	40.0	45.0	50.0	55.0	60.0
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PERCENTAGES

BET	50.0	39.1	42.1	42.2	39.2	25.1
PIN	0.5	2.5	3.9	2.4	3.2	1.5
QU	29.1	41.6	38.2	41.4	42.4	57.4
ULM	9.5	10.0	10.9	5.6	4.0	4.7
TIL	0.5	9001.0	0.0	0.8	0.0	9001.0
FA	0.5	0.0	0.0	0.0	0.0	0.0
FX	9.5	6.6	4.6	7.3	12.0	11.0
ALN	45.8	100.0	60.1	101.6	68.8	106.2
SX	0.5	0.8	2.3	2.4	2.4	1.5
COR	58.9	164.1	142.1	189.4	128.8	144.8
HED	0.0	9001.0	0.0	0.0	0.0	0.0
CALL	155.9	296.6	264.0	292.6	190.4	164.5
ERI	2.3	10.0	7.0	4.8	2.4	1.5
GRA	10.7	46.6	29.6	25.2	41.6	22.0
CYP	30.3	30.8	29.6	25.2	41.6	22.0
RUD	1.7	15.8	8.5	11.3	8.8	3.1
RCS	9001.0	0.8	0.0	0.8	0.8	2.3
MER	0.5	9001.0	1.5	0.0	0.0	0.0
CRUC	0.0	1.6	0.0	0.0	0.0	0.0
RAN	0.5	9001.0	0.7	1.6	0.8	0.0
FIL	1.7	1.6	1.5	2.4	3.2	2.3
SUCC	0.0	0.8	0.0	0.0	0.0	0.0
SPA	0.0	0.0	0.7	0.0	0.0	0.0
FILI	1.7	5.8	6.2	8.1	4.0	3.1
PCLY	0.0	0.0	9001.0	0.8	9001.0	9001.0
PTR	0.0	18.3	8.5	10.5	6.4	6.2
SPH	614.8	335.8	279.6	177.2	1232.8	598.4

BLACK BAND 1968
PERCENTAGE OF POLLEN SUM

DEPTHS						
	35.0	40.0	45.0	50.0	55.0	60.0
PERCENTAGES						
PLA	1.1	13.3	4.6	8.9	6.4	2.3
PMM	0.0	0.0	0.0	0.8	0.0	0.0
RX	0.0	0.0	1.5	0.8	0.0	0.0
COT	0.0	0.0	0.0	0.0	0.8	0.0
CGL	0.0	0.8	0.0	0.0	0.0	0.0
ART	0.0	0.8	0.7	0.8	1.6	0.7
UMB	0.5	0.0	0.7	0.0	0.0	0.0
CHE	0.0	0.8	0.7	0.8	0.0	0.0

BLACK BAND 1968
PERCENTAGE OF TOTAL POLLEN

DEPTHS						
	35.0	40.0	45.0	50.0	55.0	60.0
PERCENTAGES						
BET	12.3	5.0	6.5	5.5	6.4	4.3
PIN	0.1	0.3	0.6	0.3	0.5	0.2
QU	7.2	5.4	5.9	5.4	7.0	9.9
ULM	2.3	1.2	1.6	0.7	0.6	0.8
TIL	0.1	9001.0	0.0	0.1	0.0	9001.0
FA	0.1	0.0	0.0	0.0	0.0	0.0
FX	2.3	0.8	0.7	0.9	1.9	1.9
ALN	11.3	12.9	9.2	13.2	11.3	18.4
SX	0.1	0.1	0.3	0.3	0.3	0.2
COR	14.5	21.2	21.9	24.7	21.3	25.1
HED	0.0	9001.0	0.0	0.0	0.0	0.0
CALL	38.5	38.4	40.7	38.2	31.5	28.5
ERI	0.5	1.2	1.0	0.6	0.3	0.2
GRA	2.6	6.0	4.5	3.2	6.8	3.8
CYP	7.5	4.0	4.5	3.2	6.8	3.8
RUD	0.4	2.0	1.3	1.4	1.4	0.5

RUS						
9001.0	0.1	0.0	0.1	0.1	0.4	
MFR						
0.1	9001.0	0.2	0.0	0.0	0.0	
CRUC						
0.0	0.2	0.0	0.0	0.0	0.0	
RAN						
0.1	9001.0	0.1	0.2	0.1	0.0	
FIL						
0.4	0.2	0.2	0.3	0.5	0.4	
SUCC						
0.0	0.1	0.0	0.0	0.0	0.0	
SPA						
0.0	0.0	0.1	0.0	0.0	0.0	
FILI						
0.4	0.7	0.9	1.0	0.6	0.5	
POLY						
0.0	0.0	9001.0	0.1	9001.0	9001.0	
PTR						
0.0	2.3	1.3	1.3	1.0	1.0	
APD						
36.0	25.9	24.6	26.3	28.0	35.7	
SPO						
14.7	21.4	22.2	25.1	21.7	25.4	
NAP						
50.5	52.7	53.0	48.5	50.1	38.7	

GREENMINES 1968
 PCLLEN GRAINS COUNTED

DEPTHS	45.0	50.0	55.0	60.0	65.0	70.0
COUNT						
BET	48.0	37.0	35.0	21.0	9.0	4.0
PIN						
9001.0	1.0	3.0	4.0	2.0	8.0	
QU						
60.0	61.0	78.0	49.0	26.0	14.0	
ULM						
10.0	2.0	1.0	6.0	1.0	3.0	
TIL						
0.0	0.0	1.0	1.0	9001.0	1.0	
FX						
12.0	5.0	5.0	8.0	3.0	2.0	
ALN						
90.0	116.0	82.0	122.0	100.0	108.0	
SX						
1.0	4.0	6.0	3.0	6.0	0.0	
CCR						
133.0	145.0	156.0	229.0	255.0	265.0	
HED						
0.0	2.0	2.0	1.0	0.0	0.0	
ACE						
0.0	1.0	1.0	0.0	0.0	0.0	
ERIC						
403.0	331.0	493.0	234.0	352.0	123.0	
GRA						
149.0	100.0	246.0	261.0	406.0	457.0	
CYP						
184.0	64.0	70.0	95.0	65.0	95.0	
RUD						
6.0	28.0	37.0	9.0	20.0	3.0	
PLA						
1.0	13.0	25.0	3.0	0.0	1.0	
PMM						
1.0	1.0	2.0	0.0	0.0	0.0	
MEL						
0.0	1.0	0.0	0.0	0.0	0.0	
CCT						
0.0	0.0	0.0	0.0	0.0	0.0	
CCL						
9001.0	0.0	0.0	1.0	0.0	0.0	
ART						
1.0	2.0	0.0	1.0	1.0	1.0	
UMB						
1.0	0.0	1.0	2.0	7.0	0.0	
RCS						
8.0	5.0	15.0	8.0	7.0	0.0	
PCT						
0.0	4.0	5.0	1.0	1.0	0.0	
MER						
2.0	0.0	0.0	2.0	0.0	0.0	
CRUC						
0.0	0.0	1.0	1.0	1.0	0.0	
DNDB						
0.0	0.0	1.0	1.0	0.0	0.0	
RANE						
1.0	0.0	2.0	1.0	1.0	3.0	
RAN						
1.0	2.0	3.0	0.0	10.0	6.0	
LYS						
0.0	0.0	1.0	0.0	0.0	0.0	
CARY						
1.0	0.0	0.0	0.0	9001.0	2.0	
FIL						
2.0	3.0	9.0	11.0	6.0	0.0	

SUCC	0.0	9001.0	1.0	0.0	9001.0	4.0
SPA	0.0	0.0	0.0	0.0	3.0	0.0
FILI	2.0	9.0	11.0	24.0	10.0	35.0
PCLY	1.0	0.0	0.0	1.0	1.0	6.0
PTR	1.0	24.0	36.0	3.0	6.0	2.0
SPH	15.0	4.0	13.0	60.0	86.0	92.0

GREENMINES 1968
PERCENTAGE OF POLLEN SUM

DEPTHS	45.0	50.0	55.0	60.0	65.0	70.0
PERCENTAGES						
BET	34.2	34.9	28.4	23.5	21.9	12.5
PIN	9001.0	0.9	2.4	4.4	4.8	25.0
QU	42.8	57.5	63.4	55.0	63.4	43.7
ULM	7.1	1.8	0.8	6.7	2.4	9.3
TIL	0.0	0.0	0.8	1.1	9001.0	3.1
FX	8.5	4.7	4.0	8.9	7.3	6.2
ALN	64.2	109.4	66.6	137.0	243.9	337.5
SX	0.7	3.7	4.8	3.3	14.6	0.0
COR	95.0	136.7	126.8	257.3	621.9	828.1
HED	0.0	1.8	1.6	1.1	0.0	0.0
ACE	0.0	0.9	0.8	0.0	0.0	0.0
ERIC	287.8	312.2	400.8	262.9	858.5	384.3
GRA	106.4	94.3	200.0	293.2	990.2	1428.1
CYP	131.4	60.3	56.9	106.7	158.5	296.8
RUD	4.2	26.4	30.0	10.1	48.7	9.3
ROS	5.7	4.7	12.1	8.9	17.0	0.0
POT	0.0	3.7	4.0	1.1	2.4	0.0
MER	1.4	0.0	0.0	2.2	0.0	0.0
CRUC	0.0	0.0	0.8	1.1	2.4	0.0
QNOB	0.0	0.0	0.8	1.1	0.0	0.0
RANE	0.7	0.0	1.6	1.1	2.4	9.3

RAN	0.7	1.8	2.4	0.0	24.3	18.7
LYS	0.0	0.0	0.8	0.0	0.0	0.0
CARY	0.7	0.0	0.0	0.0	9001.0	6.2
FIL	1.4	2.8	7.3	12.3	14.6	0.0
SUCC	0.0	9001.0	0.8	0.0	9001.0	12.5
SPA	0.0	0.0	0.0	0.0	7.3	0.0
FILI	1.4	8.4	8.9	26.9	24.3	109.3
POLY	0.7	0.0	0.0	1.1	2.4	18.7
PTR	0.7	22.6	29.2	3.3	14.6	6.2
SPH	10.7	3.7	10.5	67.4	209.7	287.5

GREENMINES 1968
PERCENTAGE OF POLLEN SUM

DEPTHS						
	45.0	50.0	55.0	60.0	65.0	70.0
PERCENTAGES						
PLA	0.7	12.2	20.3	3.3	0.0	3.1
PMM	0.7	0.9	1.6	0.0	0.0	0.0
MEL	0.0	0.9	0.0	0.0	0.0	0.0
CCT	0.0	0.0	0.0	0.0	0.0	0.0
CCL	9001.0	0.0	0.0	1.1	0.0	0.0
ART	0.7	1.8	0.0	1.1	2.4	3.1
UMB	0.7	0.0	0.8	2.2	17.0	0.0

GREENMINES 1968
PERCENTAGE OF TOTAL POLLEN

DEPTHS						
	45.0	50.0	55.0	60.0	65.0	70.0
PERCENTAGES						
BET	4.2	4.0	2.4	1.9	0.7	0.3
PIN	9001.0	0.1	0.2	0.3	0.1	0.7
QU	5.3	6.6	5.3	4.5	2.0	1.2
ULM	0.8	0.2	0.0	0.5	0.0	0.2
TIL	0.0	0.0	0.0	0.0	9001.0	0.0
FX	1.0	0.5	0.3	0.7	0.2	0.1
ALN	8.0	12.7	5.6	11.4	7.8	9.8

SX	0.0	0.4	0.4	0.2	0.4	0.0
COR	11.8	15.9	10.7	21.4	20.0	24.1
HED	0.0	0.2	0.1	0.0	0.0	0.0
ACE	0.0	0.1	0.0	0.0	0.0	0.0
ERIC	35.9	36.3	34.0	21.9	27.6	11.2
GRA	13.2	10.9	16.9	24.4	31.9	41.6
CYP	16.4	7.0	4.8	8.8	5.1	8.6
RUD	0.5	3.0	2.5	0.8	1.5	0.2
RDS	0.7	0.5	1.0	0.7	0.5	0.0
POT	0.0	0.4	0.3	0.0	0.0	0.0
MER	0.1	0.0	0.0	0.1	0.0	0.0
CRUC	0.0	0.0	0.0	0.0	0.0	0.0
ONGB	0.0	0.0	0.0	0.0	0.0	0.0
RANE	0.0	0.0	0.1	0.0	0.0	0.2
RAN	0.0	0.2	0.2	0.0	0.7	0.5
LYS	0.0	0.0	0.0	0.0	0.0	0.0
CARY	0.0	0.0	0.0	0.0	9001.0	0.1
FIL	0.1	0.3	0.6	1.0	0.4	0.0
SUCC	0.0	9001.0	0.0	0.0	9001.0	0.3
SPA	0.0	0.0	0.0	0.0	0.2	0.0
FILI	0.1	0.9	0.7	2.2	0.7	3.1
POLY	0.0	0.0	0.0	0.0	0.0	0.5
PTR	0.0	2.6	2.4	0.2	0.4	0.1
SPH	1.3	0.4	0.8	5.6	6.7	8.3
APD	20.5	24.3	14.1	19.7	11.0	12.7
SPO	11.9	16.6	11.3	21.8	20.5	24.1
NAP	67.5	58.9	74.4	58.4	68.3	63.1

CRONKLEY FELL 1968
PCLLEN GRAINS COUNTED

DEPTHS	20.0	30.0	40.0	50.0	60.0	68.0	70.0	74.0	83.0
COUNT									
BET	33.0	13.0	19.0	33.0	42.0	53.0	49.0	35.0	85.0
PIN	3.0	9001.0	2.0	10.0	5.0	32.0	35.0	25.0	36.0
QU	89.0	69.0	64.0	70.0	70.0	47.0	55.0	48.0	3.0
ULM	27.0	8.0	11.0	25.0	45.0	37.0	35.0	31.0	13.0
TIL	3.0	1.0	1.0	9001.0	1.0	0.0	0.0	0.0	0.0
FX	10.0	2.0	5.0	5.0	12.0	1.0	7.0	0.0	3.0
ALN	98.0	114.0	113.0	94.0	80.0	47.0	53.0	57.0	1.0
SX	0.0	2.0	0.0	1.0	31.0	4.0	0.0	2.0	1.0
CCR	275.0	225.0	204.0	232.0	279.0	348.0	397.0	427.0	686.0
HED	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
CALL	254.0	145.0	358.0	206.0	85.0	183.0	216.0	200.0	156.0
ERI	0.0	2.0	1.0	0.0	9001.0	2.0	3.0	1.0	13.0
GRA	31.0	23.0	21.0	48.0	22.0	96.0	64.0	55.0	34.0
CYP	43.0	21.0	33.0	52.0	36.0	34.0	31.0	28.0	39.0
RUD	9001.0	2.0	7.0	4.0	5.0	19.0	9.0	7.0	0.0
PLA	9001.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
RX	0.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0
COT	0.0	0.0	1.0	1.0	1.0	1.0	1.0	2.0	0.0
UMB	0.0	9001.0	0.0	3.0	1.0	83.0	3.0	0.0	0.0
ART	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
MEL	0.0	0.0	2.0	0.0	2.0	18.0	4.0	3.0	0.0
RGS	1.0	0.0	4.0	7.0	2.0	1.0	6.0	9.0	0.0
PDT	0.0	1.0	0.0	3.0	0.0	1.0	1.0	1.0	0.0
RUB	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
MER	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
VIC	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
CAM	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
RAN	0.0	0.0	2.0	1.0	0.0	1.0	0.0	9001.0	0.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
FIL	0.0	1.0	0.0	1.0	1.0	10.0	2.0	12.0	0.0

SUCC	0.0	0.0	9001.0	1.0	0.0	9001.0	9001.0	0.0	0.0
THA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
DRD	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
TYP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
FILI	5.0	6.0	6.0	13.0	7.0	9.0	4.0	10.0	12.0
PCLY	2.0	3.0	1.0	2.0	9001.0	1.0	2.0	1.0	0.0
PTR	0.0	9001.0	2.0	3.0	1.0	4.0	1.0	1.0	0.0
SPH	19.0	25.0	28.0	91.0	2538.0	1092.0	1530.0	411.0	9048.0

CRONKLEY FELL 1968
PERCENTAGE OF POLLEN SUM

DEPTHS									
	20.0	30.0	40.0	50.0	60.0	68.0	70.0	74.0	83.0
PERCENTAGES									
BET	20.4	13.9	20.6	23.0	24.0	30.8	27.0	25.1	60.7
PIN	1.8	9001.0	2.1	6.9	2.8	18.6	19.3	17.9	25.7
QU	55.2	74.1	69.5	48.9	40.0	27.3	30.3	34.5	2.1
ULM	16.7	8.6	11.9	17.4	25.7	21.5	19.3	22.3	9.2
TIL	1.8	1.0	1.0	9001.0	0.5	0.0	0.0	0.0	0.0
FX	6.2	2.1	5.4	3.4	6.8	0.5	3.8	0.0	2.1
ALN	60.8	122.5	122.8	65.7	45.7	27.3	29.2	41.0	0.7
SX	0.0	2.1	0.0	0.6	17.7	2.3	0.0	1.4	0.7
CGR	170.8	241.9	221.7	162.2	159.4	202.3	219.3	307.1	490.0
HED	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
CALL	157.7	155.9	389.1	144.0	48.5	106.3	119.3	143.8	111.4
ERI	0.0	2.1	1.0	0.0	9001.0	1.1	1.6	0.7	9.2
GRA	19.2	24.7	22.8	33.5	12.5	55.8	35.3	39.5	24.2
CYP	26.7	22.5	35.8	36.3	20.5	19.7	17.1	20.1	27.8
RUD	9001.0	2.1	7.6	2.7	2.8	11.0	4.9	5.0	0.0
ROS	0.6	0.0	4.3	4.8	1.1	0.5	3.3	6.4	0.0
POT	0.0	1.0	0.0	2.0	0.0	0.5	0.5	0.7	0.0
RUB	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
MER	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
VIC	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
CAM	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
RAN	0.0	0.0	2.1	0.6	0.0	0.5	0.0	9001.0	0.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0

FIL	0.0	1.0	0.0	0.6	0.5	5.8	1.1	8.6	0.0
SUCC	0.0	0.0	9001.0	0.6	0.0	9001.0	9001.0	0.0	0.0
THA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
DRD	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
TYP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
FILI	3.1	6.4	6.5	9.0	4.0	5.2	2.2	7.1	8.5
POLY	1.2	3.2	1.0	1.3	9001.0	0.5	1.1	0.7	0.0
PTR	0.0	9001.0	2.1	2.0	0.5	2.3	0.5	0.7	0.0
SPH	11.8	26.8	30.4	63.6	1450.2	634.8	845.3	295.6	9048.0

CRONKLEY FELL 1968
PERCENTAGE OF POLLEN SUM

DEPTHS	20.0	30.0	40.0	50.0	60.0	68.0	70.0	74.0	83.0
PERCENTAGES									
PLA	9001.0	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
RX	0.0	0.0	1.0	0.0	0.5	0.0	0.5	0.0	0.0
COT	0.0	0.0	1.0	0.6	0.5	0.5	0.5	1.4	0.0
UMB	0.0	9001.0	0.0	2.0	0.5	48.2	1.6	0.0	0.0
ART	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
MEL	0.0	0.0	2.1	0.0	1.1	10.4	2.2	2.1	0.0

CRONKLEY FELL 1968
PERCENTAGE OF TOTAL POLLEN

DEPTHS	20.0	30.0	40.0	50.0	60.0	68.0	70.0	74.0	83.0
PERCENTAGES									
BET	3.8	2.0	2.2	4.1	5.8	5.3	5.0	3.7	7.9
PIN	0.3	9001.0	0.2	1.2	0.6	3.2	3.6	2.6	3.3
QU	10.2	10.9	7.6	8.7	9.7	4.7	5.6	5.1	0.2
ULM	3.1	1.2	1.3	3.1	6.2	3.7	3.6	3.2	1.2
TIL	0.3	0.1	0.1	9001.0	0.1	0.0	0.0	0.0	0.0
FX	1.1	0.3	0.5	0.6	1.6	0.1	0.7	0.0	0.2
ALN	11.3	18.1	13.5	11.8	11.1	4.7	5.4	6.0	0.0
SX	0.0	0.3	0.0	0.1	4.3	0.4	0.0	0.2	0.0

COR	31.7	35.7	24.4	29.1	38.9	34.9	41.0	45.4	64.0
HED	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
CALL	29.3	23.0	42.8	25.8	11.8	18.3	22.3	21.2	14.5
ERI	0.0	0.3	0.1	0.0	9001.0	0.2	0.3	0.1	1.2
GRA	3.5	3.6	2.5	6.0	3.0	9.6	6.6	5.8	3.1
CYP	4.9	3.3	3.9	6.5	5.0	3.4	3.2	2.9	3.6
RUD	9001.0	0.3	0.8	0.5	0.6	1.9	0.9	0.7	0.0
ROS	0.1	0.0	0.4	0.8	0.2	0.1	0.6	0.9	0.0
PCT	0.0	0.1	0.0	0.3	0.0	0.1	0.1	0.1	0.0
RUB	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
MER	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
VIC	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
CAM	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
RAN	0.0	0.0	0.2	0.1	0.0	0.1	0.0	9001.0	0.0
CARY	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
FIL	0.0	0.1	0.0	0.1	0.1	1.0	0.2	1.2	0.0
SUCC	0.0	0.0	9001.0	0.1	0.0	9001.0	9001.0	0.0	0.0
THA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRD	0.0	0.0	0.0	0.0	9001.0	0.0	0.0	0.0	0.0
TYP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
FILI	0.5	0.9	0.7	1.6	0.9	0.9	0.4	1.0	1.1
POLY	0.2	0.4	0.1	0.2	9001.0	0.1	0.2	0.1	0.0
PTR	0.0	9001.0	0.2	0.3	0.1	0.4	0.1	0.1	0.0
APD	29.9	32.9	24.9	29.7	35.6	21.9	24.2	20.8	13.1
SPD	32.1	36.0	24.4	29.3	43.2	35.3	41.0	45.6	64.1
NAP	37.9	31.0	51.0	40.8	21.0	42.6	34.6	33.4	22.6

DEPTHS	24.0	29.0	34.0	39.0	44.0	49.0
COUNT						
BET	189.0	34.0	66.0	37.0	15.0	57.0
PIN	4.0	2.0	10.0	56.0	108.0	66.0
QU	38.0	79.0	47.0	34.0	22.0	11.0
ULM	3.0	4.0	27.0	39.0	31.0	29.0
TIL	0.0	9001.0	1.0	1.0	0.0	1.0
FX	7.0	3.0	1.0	0.0	1.0	1.0
ALN	84.0	107.0	56.0	53.0	18.0	6.0
SX	2.0	6.0	6.0	4.0	4.0	3.0
COR	239.0	151.0	159.0	196.0	258.0	417.0
ACE	0.0	2.0	0.0	0.0	0.0	0.0
ERI	4.0	6.0	7.0	4.0	2.0	2.0
GRA	179.0	316.0	277.0	165.0	149.0	176.0
CYP	44.0	129.0	137.0	315.0	182.0	204.0
RUD	51.0	48.0	26.0	8.0	13.0	16.0
PLA	1.0	3.0	0.0	0.0	0.0	0.0
PMM	0.0	0.0	1.0	0.0	0.0	0.0
RX	0.0	2.0	0.0	0.0	1.0	0.0
COT	0.0	0.0	2.0	9001.0	2.0	4.0
COL	0.0	1.0	0.0	0.0	1.0	0.0
UMB	3.0	3.0	16.0	7.0	9.0	12.0
MEL	46.0	39.0	6.0	1.0	0.0	0.0
ROS	9.0	31.0	6.0	3.0	2.0	8.0
POT	16.0	99.0	0.0	1.0	0.0	0.0
HEL	1.0	0.0	0.0	0.0	0.0	0.0
RUB	0.0	0.0	0.0	3.0	0.0	0.0
MER	0.0	1.0	0.0	0.0	0.0	0.0
CRUC	0.0	0.0	0.0	1.0	0.0	1.0
CAM	9001.0	0.0	0.0	0.0	0.0	0.0
OND	0.0	0.0	1.0	0.0	0.0	0.0
ONDB	0.0	0.0	0.0	0.0	1.0	0.0
VIC	0.0	0.0	9001.0	0.0	0.0	0.0

RANE	1.0	0.0	1.0	0.0	0.0	1.0
RAN	0.0	5.0	0.0	0.0	2.0	9001.0
CARY	9001.0	2.0	2.0	3.0	0.0	0.0
FIL	4.0	17.0	23.0	7.0	12.0	13.0
SUCC	1.0	3.0	2.0	0.0	1.0	0.0
VAL	0.0	0.0	9001.0	0.0	1.0	0.0
EPIL	0.0	9001.0	9001.0	0.0	0.0	0.0
FILI	5.0	14.0	9.0	81.0	67.0	132.0
POLY	9001.0	9001.0	2.0	11.0	1.0	2.0
PTR	1.0	4.0	3.0	6.0	7.0	9.0
SPH	28.0	13.0	31.0	50.0	144.0	107.0

BLACK HILL 1968
PERCENTAGE OF POLLEN SUM

DEPTHS	24.0	29.0	34.0	39.0	44.0	49.0
PERCENTAGES						
BET	78.4	30.3	43.4	22.1	8.4	33.3
PIN	1.6	1.7	6.5	33.5	61.0	38.5
QU	15.7	70.5	30.9	20.3	12.4	6.4
ULM	1.2	3.5	17.7	23.3	17.5	16.9
TIL	0.0	9001.0	0.6	0.5	0.0	0.5
FX	2.9	2.6	0.6	0.0	0.5	0.5
ALN	34.8	95.5	36.8	31.7	10.1	3.5
SX	0.8	5.3	3.9	2.3	2.2	1.7
CGR	99.1	134.8	104.6	117.3	145.7	243.8
ACE	0.0	1.7	0.0	0.0	0.0	0.0
ERI	1.6	5.3	4.6	2.3	1.1	1.1
GRA	74.2	282.1	182.2	98.8	84.1	102.9
CYP	18.2	115.1	90.1	188.6	102.8	119.2
RUD	21.1	42.8	17.1	4.7	7.3	9.3
RDS	3.7	27.6	3.9	1.7	1.1	4.6
POT	6.6	88.3	0.0	0.5	0.0	0.0
HEL	0.4	0.0	0.0	0.0	0.0	0.0
RUB	0.0	0.0	0.0	1.7	0.0	0.0
MER	0.0	0.8	0.0	0.0	0.0	0.0
CRUC	0.0	0.0	0.0	0.5	0.0	0.5
CAM	9001.0	0.0	0.0	0.0	0.0	0.0

TIL	0.0	9001.0	0.1	0.1	0.1	0.0
ULM	0.3	0.3	3.1	4.1	3.7	2.8
QU	4.3	7.7	5.5	3.6	2.6	1.0
PIN	0.4	0.1	1.1	6.0	13.1	6.4
BET	21.6	3.3	7.7	3.9	1.8	5.5
PERCENTAGES						
DEPTHS	24.0	29.0	34.0	39.0	44.0	49.0

BLACK HILL 1968
PERCENTAGE OF TOTAL POLLEN

MEL	19.0	34.8	3.9	0.5	0.0	0.0
UMB	1.2	2.6	10.5	4.1	5.0	7.0
CCL	0.0	0.8	0.0	0.0	0.5	0.0
CCT	0.0	0.0	1.3	9001.0	1.1	2.3
RX	0.0	1.7	0.0	0.0	0.5	0.0
PM	0.0	0.0	0.6	0.0	0.0	0.0
PLA	0.4	2.6	0.0	0.0	0.0	0.0
PERCENTAGES						
DEPTHS	24.0	29.0	34.0	39.0	44.0	49.0

BLACK HILL 1968
PERCENTAGE OF POLLEN SUM

SPH	11.6	11.6	20.3	29.9	81.3	62.5
PTR	0.4	3.5	1.9	3.5	3.9	5.2
POLY	9001.0	9001.0	1.3	6.5	0.5	1.1
FILI	2.0	12.5	5.9	48.5	37.8	77.1
EPIL	0.0	9001.0	9001.0	0.0	0.0	0.0
VAL	0.0	0.0	9001.0	0.0	0.5	0.0
SUCC	0.4	2.6	1.3	0.0	0.5	0.0
FIL	1.6	15.1	15.1	4.1	6.7	7.6
CARY	9001.0	1.7	1.3	1.7	0.0	0.0
RAN	0.0	4.4	0.0	0.0	1.1	9001.0
RANE	0.4	0.0	0.6	0.0	0.0	0.5
VIC	0.0	0.0	9001.0	0.0	0.0	0.0
DNGB	0.0	0.0	0.0	0.0	0.5	0.0
DNG	0.0	0.0	0.6	0.0	0.0	0.0

FX	0.8	0.2	0.1	0.0	0.1	0.0
ALN	9.6	10.5	6.5	5.6	2.1	0.5
SX	0.2	0.5	0.7	0.4	0.4	0.2
COR	27.3	14.8	18.6	21.0	31.3	40.9
ACE	0.0	0.1	0.0	0.0	0.0	0.0
ERI	0.4	0.5	0.8	0.4	0.2	0.1
GRA	20.4	31.1	32.4	17.7	18.1	17.2
CYP	5.0	12.7	16.0	33.8	22.1	20.0
RUD	5.8	4.7	3.0	0.8	1.5	1.5
RDS	1.0	3.0	0.7	0.3	0.2	0.7
POT	1.8	9.7	0.0	0.1	0.0	0.0
HEL	0.1	0.0	0.0	0.0	0.0	0.0
RUB	0.0	0.0	0.0	0.3	0.0	0.0
MER	0.0	0.0	0.0	0.0	0.0	0.0
CRUC	0.0	0.0	0.0	0.1	0.0	0.0
CAM	9001.0	0.0	0.0	0.0	0.0	0.0
DNO	0.0	0.0	0.1	0.0	0.0	0.0
ONOB	0.0	0.0	0.0	0.0	0.1	0.0
VIC	0.0	0.0	9001.0	0.0	0.0	0.0
RANE	0.1	0.0	0.1	0.0	0.0	0.0
RAN	0.0	0.4	0.0	0.0	0.2	9001.0
CARY	9001.0	0.1	0.2	0.3	0.0	0.0
FIL	0.4	1.6	2.6	0.7	1.4	1.2
SUCC	0.1	0.2	0.2	0.0	0.1	0.0
VAL	0.0	0.0	9001.0	0.0	0.1	0.0
EPIL	0.0	9001.0	9001.0	0.0	0.0	0.0
FILI	0.5	1.3	1.0	8.7	8.1	12.9
POLY	9001.0	9001.0	0.2	1.1	0.1	0.1
PTR	0.1	0.3	0.3	0.6	0.8	0.8
SPH	3.2	1.2	3.6	5.3	17.5	10.5
APD	37.1	22.5	24.3	23.6	23.7	17.3
SPD	27.5	15.6	19.3	21.5	32.4	41.2
NAP	35.3	61.7	56.3	54.8	44.4	41.3