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Analysis of leaf size of the Ipolytarnóc flora from a climatological point of view

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Abstract: Leaf-size analyses have been carried out on a Lower Miocene sample of about 1220 individuals from Ipolytarnóc, the first study of its kind in Hungary. A subtropical moist climate is suggested by the relationship between climate and leaf-size. This conclusion is in accordance with earlier findings based on species composition.

The Ottnangian (Lower Miocene) flora from Ipolytarnóc has so far yielded about five thousand specimens (HABLY 1985), including series of several hundred specimens for various species, rendering a statistical analysis of the material possible.

MATERIAL AND METHOD

Species preserved as impressions of measurable size, i.e. more or less complete, have been studied. Usually there was no difficulty in measuring the length and width of the lamellae as they have mainly been excellently preserved in riolite tuff. In a few cases, especially for Quercus crucita, the length measurements could not be taken with certainty so they have been omitted from the analyses.

This study is based on the well-known relationship between leaf-size and the character of the climate (WEBB, 1959, DOLPH & DILCHER 1979, DOLPH & DILCHER 1980 a, b). The above studies were based on actual field studies and large sample sizes. Their results suggest that this method is suitable for drawing palaeo-climatological conclusions, although it is a rather difficult exercise as recent study material is not available in sufficient numbers. Therefore in palaeobotany mainly relative comparisons are made, i.e. leaf-size categories calculated in the same way are compared between various localities.

WEBB (1959) used three leaf-size categories: microphyll < 7.6 cm, notophyll 7.6 - 12.7 cm (20.25 - 45.0 sq cm), mesophyll $>$ 12.7 cm (45.0 - 182.25 sq cm). Referring the leaves to either of these three leaf categories, WEBB gave percentile frequency in each of the climatic forest associations, as follows:

Tropical Rain-forest region: MVF, SEVF, DVT (lowland and lower montane), SMVF, NVF, SNVF, AVW (lower montane or montane), MMT (montane).

Subtropical Rain-forest region: NVF, AVF, AVW, SEVT (lowland and lower montane), AVF, SNVF (lowland and lower montane), MMF, MMT (montane).

Temperate Rain-forest region: SNVF, MMF (lowland and lower montane), MMF, MMT (montane).

The percentile frequency of the mesophyll and microphyll leaves, as well as those of the species and specimens are given for each of the above forest types. This is one of the aspects that may be compared with the results of this study, that is, the percentile frequency distribution of leaf-sizes, in order to determine which climatic forest type the Ipolytarnóc flora belonged to.

Another comparative material is from Costa Rica, studied by DOLPH & DILCHER (1980 a), in which the leaf-size distribution from 38 localities may be compared with those from this study. The following seven leaf-size categories were distinguished:

leptophyll (up to 0.25 sq cm in area)
nanophyll (0.25 - 2.25 sq cm in area)
microphyll (2.25 - 20.25 sq cm in area)
notophyll (20.25 - 45.0 sq cm in area)
mesophyll (45.0 - 182.25 sq cm in area)
macrophyll (182.25 - 1640.2 sq cm in area)
megaphyll (> 1640.2 sq cm in area),

the area of which was calculated from the formula (CAIN & CASTRO 1959):

$$A=2/3(L\cdot W)$$

A= area of the leaf or leaflet in sq cm
L= leaf length in cm
W= leaf width in cm.

In order to facilitate easier comparison, the percentile frequency of the large leaves (> 20.25 sq cm) is also given. These data were also depicted in relation to climate. During the reconstruction of the Ipolytarnóc flora, both of the above approaches have been tested in the hope that an impression closer to the actual picture might be obtained. We must take into consideration, however, that fossilizatin selection does not favour large leaves, which are probably under-represented in the fossil flora. Even though Sabal major and Calamus noszkyi occur in large numbers in the Ipolytar-

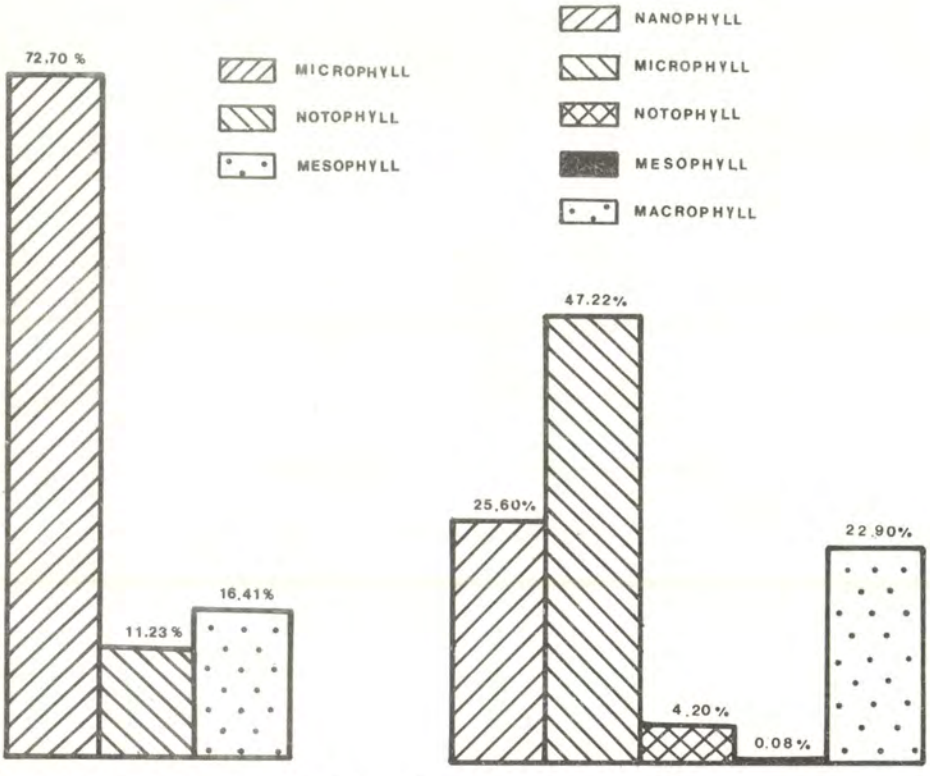


Fig. 1. Leaf-size distribution in the Ipolytarnóc flora

nóc flora, these species would have to be omitted from the statistical analysis as no precise measurements could be taken. Such an action would, however, entail a loss of the larger leaves (the macrophyll category), leading us to a false conclusion as regards climate. In order to overcome this problem, approximate values were taken for there species, which does not lead to any problems as size categories are used anyway (Fig. 1).

RESULTS

Leaf-size distribution of the Ipolytarnóc flora is given in Tables 1 and 2. The microphyll type is predominant according to both methods. Nanophylous and macrophyll leaves occurred in equal numbers, whereas notophyll and mesophyll ones only in small proportion. The two extreme categories, i.e. leptophyll and megaphyll leaves, were completely absent.

The other method which takes only length into consideration, works with fewer categories, thus pooling several size intervals. As a result of this the predominance of the microphyll category is even more striking, but the proportion of the notophyll and mesophyll leaves is also considerable.

The range of variation of the various species is also worthy of mention. With the exception of the palms there is not a single species that occurs only in one single size category. The species occurring only once in the table, Daphnogene cinnamomifolia, Dryophyllum furcinerve, Elaeocarpus palaeolanceolatus, Laurophyllum pseudoprinceps, Magnolia dianae, M. mirabilis are all represented by 2-6 specimens, so could they not be analysed statistically. Most of the species occurred in two adjacent size categories, one of them being consistently the microphyll interval. Rarely, only in two cases (Laurophyllum heeri, Platanus neptuni), three size categories were also found. In these cases most of the specimens fell into the median size interval.

Table 1. Summary of leaf area for the sample sites in Ipolytarnóc

Species	Nanophyll 0.25-2.25	Microphyll 2.25-20.25	Notophyll 20.25-45.0	Mesophyll 45.0-182.25	Macrophyll 182.25-1640.2
1. Arbutus elegans		1	1		
2. Calamus noszkyi					211
3. Cyclocarya cyclocarpa	1	53			
4. Daphne oehningensis	3	2			
5. Daphnogene bilinica	120	244			
6. Daphnogene cinnamomeifolia		4	1		
7. Daphnogene cinnamomifolia			1		
8. Daphnogene polymorpha	1	13			
9. Daphnogene spectabile		1	1		
10. Dryophyllum furcinerve		2			
11. Elaeocarpus palaeolanceolatus		1			
12. Engelhardtia orsbergensis	169	60			
13. Laurophyllum heeri		5	8	1	
14. Laurophyllum pseudoprinceps		3			
15. "Laurus" primigenia		3	4		
16. Laurus princeps		43	1		
17. Litsea ipolytarnoensis		1	2		
18. Magnolia dianae			6		
19. Magnolia mirabilis			1		

Table 1 (continued)

Species	Nanophyll 0.25-2.25	Microphyll 2.25-20.25	Notophyll 20.25-45.0	Mesophyll 45.0-182.25	Macrophyll 182.25-1640.2
20. Myrtophyllum sp.	2	5			
21. Persea braunii		3	2		
22. Platanus neptuni	9	121	23		
23. "Quercus cruciata"		4	2		
24. Sabal major					65
25. Spiraea sp.	3	1			
	308	570	53	1	276
%	25.60	47.22	4.20	0.08	22.90

Table 2. Summary of leaf length for the sample sites in Ipolytarnóc

Species	Microphyll 7.6 cm	Notophyll 7.6 - 12.7 cm	Mesophyll 12.7 cm
1. Arbutus elegans	1	2	
2. Calamus noszkyi			211
3. Cyclocarya cyclocarpa	55		
4. Daphne oehningensis	5		
5. Daphnogene bilinica	366		
6. Daphnogene cinnamomeifolia	3	2	
7. Daphnogene cinnamomifolia		1	
8. Daphnogene polymorpha	14		
9. Daphnogene spectabile	1	1	
10. Dryophyllum furcinerve	2		
11. Elaeocarpus palaeolanceolatus	1		
12. Engelhardtia orsbergensis	238		
13. Laurophyllum heeri		12	2
14. Laurophyllum pseudoprinceps	1	2	
15. "Laurus" primigenia	1	6	
16. Laurus princeps	37	7	
17. Litsea ipolytarnocziense	1	2	
18. Magnolia dianae		5	1
19. Magnolia mirabilis		1	
20. Myrtophyllum sp.		7	
21. Persea braunii	3	2	
22. Platanus neptuni	80	74	1
23. "Quercus cruciata"	3	4	
24. Sabal major			65
25. Spiraea sp.	4		
	816	128	280
%	66.67	10.45	22.88

DISCUSSION

In the course of the analysis of the Ipolytarnóc flora I found that compared with the fossil floras, leaf size varied considerably. Five leaf area categories were distinguished. Similar patterns have been found in Eocene floras in Germany (MAI & WALTHER 1985).

Since there are no other Hungarian data available, we could not compare the findings of this study with other local Neogene floras. However, compared with other fossil and recent studies, we may conclude that the climate was a wet subtropical one. This conclusion is in agreement with my previous finding based on the species composition of the flora (HABLY 1985).

Similarities may be found with the histograms of Eocene floras from Germany (MAI & WALTHER 1985). In these floras the microphyll elements dominate, but the proportion of the nanophyll elements is also considerable. The proportion of the notophyll and macrophyll elements is different. In the abovementioned Eocene flora the former ones, in Ipolytarnóc the latter ones play a significant role in the absence of the palms.

Further detailed conclusions as regards palaeo-climate and climatic changes may be drawn with the above methods based on fossil floras.

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Table 3. Leaf size of Arbutus elegans

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 420. 1.	3,2	-			82. 429. 1.	7,9	3,8	2,1	20,0
82. 421. 1.	-	4,2			82. 430. 1.	8,6	3,7	2,3	21,2

Table 4. Leaf size of Cyclocarya cyclocarpa

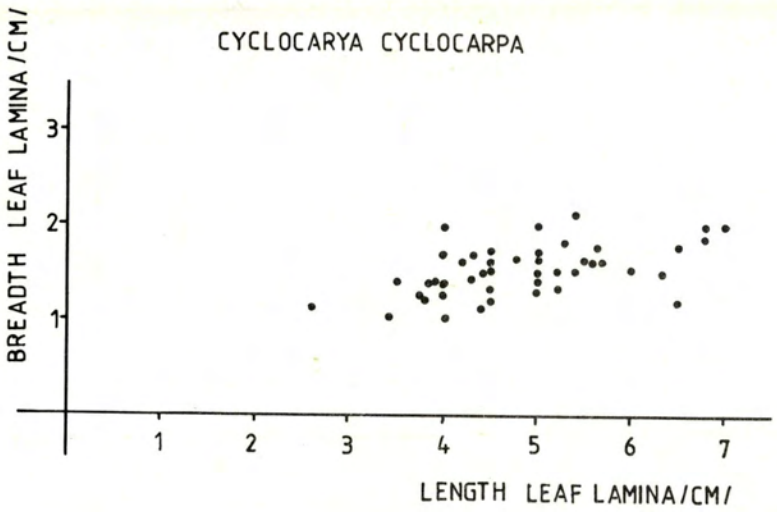
No.	length	width	L/W	A	No.	length	width	L/W	A
53. 2. 2.	-	1,3			54. 994. 1.	-	2,6		
53. 5. 2.	-	1,7			54. 996. 1.	-	2,1		
53. 9. 1.	4,3	1,7	2,5	4,9	54. 997. 1.	4,0	1,3	3,1	3,5
53. 10. 1.	-	1,6			54. 998. 1.	5,0	1,5	3,3	5,0
53. 11. 1.	-	1,6			54. 999. 2.	5,0	1,7	2,9	5,7
53. 14. 1.	-	2,1				-	2,0		
	-	1,6			54. 987. 1.	5,2	1,6	3,25	5,5
53. 17. 1.	2,6	1,1	2,4	1,9	54. 1002. 1.	5,7	1,6	3,6	6,1
54. 993. 1.	4,5	1,5	3,0	4,5	54. 1006. 1.	-	1,4		
54. 988. 1.	5,0	1,7	2,9	5,7	54. 1004. 1.	-	1,2		

Table 4 (continued)

No.	length	width	L/W	A
54. 1004. 1.	-	1 2		
54. 1005. 1.	3,9	1.4	2.9	3,6
54. 1003. 1.	-	2,4		
54. 1008. 1.	-	1.9		
54. 1010. 1.	-	1.5		
54. 1011. 1.	-	1.3		
54. 1012. 1.	4,3	-		
54. 1013. 1.	7,3	2,4	3.0	11.7
54. 1016. 1.	3.0	1,4	2.1	2.8
54. 1015. 1.	5.0	1.8	2.8	6.0
54. 1026. 1.	-	1,1		
	-	2.1		
54. 1018. 1.	-	1,4		
54. 1017. 1.	4,8	1.6	3,0	5,1
54. 1020. 1.	-	1.7		
54. 1021. 2.	4.5	1,6	2,8	4,8
	-	1,6		
	4.2	1.6	2,6	4,5
54. 1024. 1.	4,0	1.7	2.35	4,5
54. 1027. 1.	-	1.8		
54. 1028. 1.	-	1,4		
54. 1030. 1.	3.5	1.4	2,5	3,3
54. 1031. 1.	3,4	1.0	3,4	2,3
54. 1032. 1.	4,0	2,0	2,0	5,3
54. 1036. 1.	3,8	1.4	2.7	3,5
54. 1040. 1.	-	2.5		
	-	1.7		
	-	2.4		
	-	1,75		
54. 1043. 1.	4.5	1,3	3.5	3.9
54. 1044. 1.	-	1.6		
54. 1045. 1.	4,0	1.4	2,85	3,7
54. 1047. 1.	-	2.0		
54. 1049. 1.	5,0	1.6	3,1	5.3
54. 1050. 1.	-	1.5		
	-	1.4		
54. 1053. 1.	4.0	1.0	4.0	2.7
54. 1052. 1.	-	2.4		
54. 1051. 1.	-	1.7		
54. 1058. 1.	5.0	1.3	3.8	4.3
54. 1059. 1.	3,8	1.2	3,2	3.0
54. 1060. 1.	-	2.0		
54. 1063. 1.	-	1.5		
54. 1064. 1.	4.0	1.3	3.1	3.5
54. 1065. 1.	-	1.6		
54. 1066. 3.	-	1.7		
	-	1.8		
54. 1069. 2.	5.2	1.5	3,5	5.2
	6.5	1.8	3,6	7,8
54. 1071. 2.	5.0	2.0	2.5	6.7
	5.6	1.6	3,5	6,0
54. 1074. 1.	-	2,0		
54. 1075. 1.	6,0	1,5	4,0	6,0
54. 1076. 1.	-	2,1		
54. 1077. 1.	5,5	1,6	3,4	5,9
	-	1,5		
	4.5	1.7	2,6	5,1
54. 1079. 1.	4.4	1.5	2.9	4,4
54. 1080. 1.	4.4	1.1	4.0	3.2
54. 1081. 1.	-	1,5		
54. 1082. 1.	3,7	1,25	2.9	3,1
54. 1083. 1.	5,2	1.3	4.0	4,5
54. 1084. 1.	5.0	1.4	3,6	4,7
54. 1085. 1.	-	1.6		
54. 1086. 1.	6.3	1.5	4,2	6.3
54. 1088. 1.	4.5	1.8	2,5	5,4
54. 1089. 1.	4.8	1.7	2,8	5.4
54. 1092. 1.	6.8	1.9	3,6	8.6
54. 1093. 1.	5.4	1.5	3.6	5.4
54. 1094. 1.	4.3	1,4	3,1	4.0
54. 1096. 1.	-	2.6		
54. 1097. 1.	6.5	1.2	5.4	5.2
54. 1098. 1.	7.0	2.0	3.5	9.3
	-	1.3		
54. 1102. 2.	5.3	1,8	2.9	6.4
54. 1103. 1.	-	1.3		
54. 1104. 1.	-	1.8		
54. 1107. 1.	-	1.6		
54. 1108. 1.	6.8	2.0	3.4	9.1
	-	1.6		
	-	1.4		
	5.6	1.8	3,1	6.7
	5.4	2,1	2,8	7,6
54. 1109. 1.	4.5	1,2	3,75	3,6
54. 1110. 1.	4,5	1,3	3.5	3,9

Table 5. Leaf size of Daphne oehningensis

No.	length	width	L/W	A
82. 240. 1.	4,3	1,0	4,3	2,9
82. 238. 1.	2,2	0,5	4,4	0,7
82. 239. 1.	2,3	0.6	3,8	0,9
82. 241. 1.	1.4	0.55	2.5	0.5
82. 402. 1.	4.1	1.2	3.4	3.3


CYCLOCARYA CYCLOCARPA
BREADTH LEAF LAMINA/CM/
3
2
1
1
2
3
4
5
6
7
LENGTH LEAF LAMINA/CM/

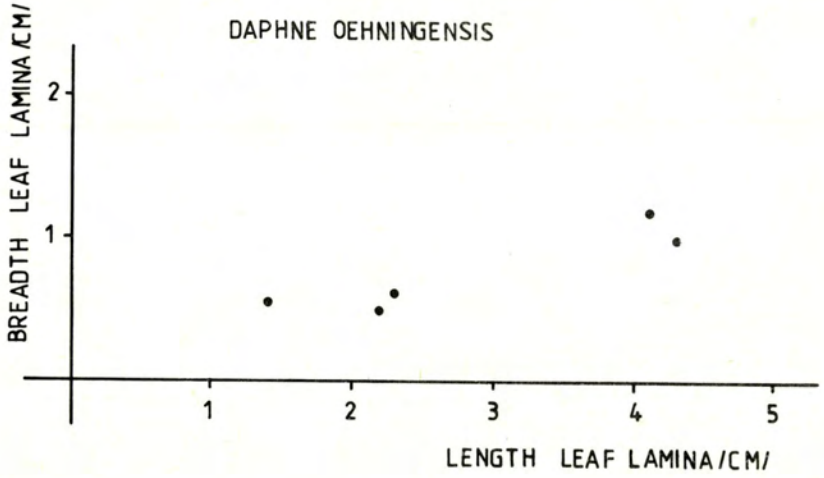

DAPHNE OEHNINGENSIS
BREADTH LEAF LAMINA/CM/
2
1
1
2
3
4
5
LENGTH LEAF LAMINA/CM/

Table 6 . Leaf size of Daphnogene bilinica

No.	length	width	L/W	A
56. 477. 1	3.2	1.2	2.7	2.6
	3.1	1.2	2.6	2.5
	-	1.9		
	-	1.1		
	2.3	1.8	1.3	2.8
	3.0	1.3	2.3	2.6
	-	1.9		
56. 476. 1.	1.7	0.9	1.9	1.0
	2.5	1.0	2.5	1.7
56. 449. 1.	5.5	1.3	4.2	4.8
56. 454. 1	-	1.5		
56. 475. 1.	-	0.9		
	-	2.2		
	2.5	1.0	2.5	1.7
56. 464. 1.	-	1.0		
	-	1.0		
56. 455. 1.	3.5	1.6	2.2	3.7
56. 447. 1.	2.6	0.8	3.25	1.4
56. 443. 1.	2.1	0.9	2.3	1.3
56. 448. 1.	-	1.5		
56. 459. 1.	-	1.4		
56. 460. 1.	4.6	1.7	2.7	5.2
	-	2.2		
56. 468. 1.	5.5	2.7	2.0	9.9
56. 456. 1.	3.0	1.5	2.0	3.0
56. 439. 1.	-	1.0		
56. 453. 1.	4.1	1.6	2.6	4.4
56. 445. 1.	1.5	0.8	1.9	0.8
56. 457. 1.	3.0	1.5	2.0	3.0
56. 471. 1.	3.5	0.7	5.0	1.6
	-	0.6		
56. 473. 1.	1.8	1.2	1.5	1.4
56. 461. 1.	4.6	1.7	2.7	5.2
	-	1.8		
56. 440. 1.	3.5	1.7	2.05	3.9
56. 466. 1.	2.8	1.2	2.3	2.2
	3.3	1.1	3.0	2.4
56. 444. 1.	-	1.2		
	-	2.2		
56. 470. 1.	3.3	1.0	3.3	2.2
	3.8	1.2	3.2	3.0
56. 469. 1.	1.5	1.0	1.5	1.0
	-	1.3		
56. 467. 1.	2.0	1.3	1.5	1.7
56. 463. 1.	3.5	1.8	1.9	4.2
56. 451. 1.	3.8	1.0	3.8	2.5
56. 450. 1.	2.3	0.9	2.55	1.4
56. 441. 1.	-	1.3		
56. 458. 1.	5.6	1.1	5.1	4.1
56. 472. 1.	4.2	1.7	2.5	4.8
	-	1.8		
56. 371. 1.	2.9	1.2	2.4	2.3
56. 358. 1.	5.7	1.4	4.1	5.3
56. 369. 1.	3.5	1.3	2.7	3.0
56. 366. 1.	1.9	1.0	1.9	1.3
	-	1.8		

No.	length	width	L/W	A
56. 370. 1.	-	1.5		
56. 359. 1.	5.7	1.5	3.8	5.7
	6.5	3.8	1.7	16.5
56. 383. 1.	3.2	0.9	3.55	1.9
56. 376. 1.	1.2	0.4	3.0	0.3
56. 380. 1.	5.8	1.3	4.5	5.0
56. 387. 1.	5.6	1.7	3.3	6.3
56. 367. 1.	3.6	1.1	3.3	2.6
56. 375. 1.	4.1	1.5	2.7	4.1
56. 362. 1.	4.3	1.4	3.1	4.0
56. 385. 1.	2.8	0.8	3.5	1.5
56. 357. 1.	4.1	1.1	3.7	3.0
56. 368. 1.	4.3	1.2	3.6	3.4
56. 384. 1.	2.5	1.0	2.5	1.7
56. 363. 1.	2.7	1.0	2.7	1.8
56. 395. 1.	4.8	1.8	2.7	5.8
56. 389. 1.	1.9	0.9	2.1	1.1
56. 356. 1.	5.8	2.2	2.6	8.5
56. 374. 1.	5.0	1.7	2.9	5.7
56. 378. 1.	2.2	0.7	3.1	1.0
56. 394. 1.	3.5	1.5	2.3	3.5
56. 377. 1.	7.2	1.5	4.8	7.2
56. 382. 1.	4.5	1.8	2.5	5.4
	1.3	0.7	1.85	0.6
56. 361. 1.	4.2	1.4	3.0	3.9
	5.3	1.3	4.1	4.6
56. 386. 1.	-	0.9		
56. 392. 1.	2.7	1.2	2.25	2.2
56. 396. 1.	2.1	0.6	3.5	0.8
56. 373. 1.	2.3	0.7	3.3	1.1
56. 360. 1.	5.2	1.7	3.05	5.9
56. 393. 1.	4.8	1.1	4.4	3.5
56. 364. 1.	3.5	1.3	2.7	3.0
56. 381. 1	4.3	1.5	2.9	4.3
56. 492. 1.	4.7	1.8	2.6	5.6
	2.2	0.9	2.4	1.3
56. 505. 1.	2.9	0.8	3.6	1.5
	1.8	0.4	4.5	0.5
56. 480. 1.	4.2	2.0	2.1	5.6
	2.4	1.3	1.8	2.1
56. 496. 1.	2.2	1.1	2.0	1.6
56. 495. 1.	1.7	0.8	2.1	0.9
	4.0	1.0	4.0	2.7
56. 493. 1.	2.8	1.4	2.0	2.6
56. 484. 1.	2.6	1.1	2.4	1.9
56. 481. 1.	6.7	1.1	6.1	4.9
	2.6	0.8	3.25	1.4
56. 478. 1.	2.1	1.4	1.5	1.9
56. 497. 1.	3.2	1.6	2.0	3.4
56. 479. 1.	4.7	1.3	2.6	4.1
	-	1.3		
56. 503. 1.	-	1.2		
56. 504. 1.	4.5	1.8	2.5	5.4
56. 487. 1.	6.0	1.7	3.5	6.8
56. 494. 1.	3.5	0.7	5.0	3.9
56. 486. 1.	3.2	1.4	2.3	3.0

Table 6 (continued)

No.	length	width	L/W	A
56. 488. 1.	2.6	1.0	2.6	1.7
56. 483. 1.	2.8	0.5	5.6	0.9
56. 482. 1.	-	1.0		
	-	0.9		
56. 502. 1.	5.0	1.6	3.1	5.3
	3.5	1.1	3.2	2.6
56. 491. 1.	2.8	1.0	2.8	1.9
56. 489. 1.	-	0.9		
56. 202. 1.	2.0	0.7	2.85	0.9
56. 211. 1.	3.2	0.6	5.3	1.3
56. 214. 1.	3.8	1.1	3.45	2.8
56. 215. 1.	1.8	0.7	2.6	0.8
56. 201. 1.	3.8	1.4	2.7	3.5
56. 217. 1.	2.4	1.6	1.5	2.6
56. 196. 1.	2.4	0.8	3.0	1.3
56. 219. 1.	2.7	1.0	2.7	1.8
56. 198. 1.	2.4	0.8	3.0	1.3
56. 221. 1.	-	1.8		
56. 218. 1.	2.5	0.9	2.8	1.5
56. 213. 1.	2.9	1.4	2.1	2.7
56. 209. 1.	-	0.8		
56. 203. 1.	-	1.5		
56. 223. 1.	-	0.6		
56. 207. 1.	4.3	1.8	2.4	5.2
56. 206. 1.	-	1.1		
56. 208. 1.	4.3	1.2	3.6	3.4
56. 199. 1.	5.2	1.4	3.7	4.85
56. 222. 1.	4.7	1.6	2.9	5.0
	4.0	1.6	2.5	4.3
56. 210. 1.	2.3	0.7	3.3	1.1
56. 176. 1.	2.3	0.8	2.9	1.2
56. 177. 1.	3.9	1.1	3.5	2.9
56. 178. 1.	3.7	1.2	3.1	2.9
56. 167. 1.	2.2	1.0	2.2	1.5
	-	0.8		
56. 166. 1.	-	0.7		
56. 183. 1.	3.7	1.1	3.4	2.7
56. 179. 1.	3.4	1.2	2.8	2.7
56. 173. 1.	3.5	1.2	2.9	2.8
56. 191. 1.	3.1	1.4	2.2	2.9
56. 172. 1.	4.0	1.0	4.0	2.7
56. 194. 1.	-	1.2		
56. 189. 1.	4.0	1.5	2.7	4.0
56. 188. 1.	-	1.7		
56. 169. 1.	6.8	2.1	3.2	9.5
56. 193. 1.	4.3	1.2	3.6	3.4
56. 192. 1.	3.6	1.1	3.3	2.6
56. 170. 1.	5.6	1.0	5.6	3.7
56. 171. 1.	5.6	1.0	5.6	3.7
56. 180. 1.	2.2	0.6	3.7	0.9
56. 161. 1.	1.2	0.5	2.4	0.4
56. 174. 1.	5.0	1.3	3.8	4.3
56. 187. 1.	1.8	1.0	1.8	1.2
56. 175. 1.	4.2	1.2	3.5	3.4
56. 165. 1.	2.9	0.8	3.6	1.5
56. 164. 1.	3.0	0.8	3.75	1.6

No.	length	width	L/W	A
56. 191. 1.	3.0	1.4	2.1	2.8
56. 437. 1.	2.3	1.0	2.3	1.5
	-	1.7		
56. 422. 1.	3.0	1.1	2.7	2.2
56. 413. 1.	4.7	1.7	2.8	5.3
56. 405. 1.	-	0.6		
56. 437. 1.	2.7	0.7	3.85	1.3
56. 411. 1.	3.6	1.1	3.3	2.6
56. 409. 1.	5.1	1.4	3.6	4.8
56. 407. 1.	2.9	1.8	1.6	3.5
56. 416. 1.	2.3	1.1	2.1	1.7
56. 410. 1.	2.6	1.2	2.2	2.1
56. 423. 1.	-	0.8		
56. 417. 1.	-	1.2		
56. 431. 1.	5.2	2.5	2.1	8.7
	3.7	1.5	2.5	3.7
	4.7	1.6	2.9	5.0
56. 408. 1.	3.1	1.2	2.6	2.5
56. 419. 1.	2.2	0.6	3.7	0.9
56. 398. 1.	-	1.6		
56. 432. 1.	4.6	1.5	3.1	4.6
56. 401. 1.	3.6	-		
56. 400. 1.	-	1.5		
56. 399. 1.	2.4	0.6	4.0	0.9
56. 406. 1.	2.5	0.6	4.2	1.0
56. 412. 1.	3.1	0.8	3.9	1.6
	2.8	1.3	2.15	2.4
56. 404. 1.	4.3	1.4	3.1	4.0
56. 323. 1.	5.5	1.2	4.6	4.4
56. 345. 1.	-	1.2		
56. 328. 1.	-	1.4		
56. 326. 1.	4.7	1.4	3.35	4.4
56. 331. 1.	3.7	1.1	3.4	2.7
56. 349. 1.	4.0	1.1	3.6	2.9
56. 327. 1.	5.6	1.4	4.0	5.2
56. 322. 1.	5.4	1.2	4.5	4.3
56. 324. 1.	-	0.6		
56. 342. 1.	4.2	1.1	3.8	3.1
56. 329. 1.	5.7	1.4	4.1	5.3
56. 341. 1.	2.7	1.0	2.7	1.8
56. 350. 1.	1.9	0.6	3.2	0.8
56. 339. 1.	4.2	1.1	3.8	3.1
56. 343. 1.	2.7	1.1	2.45	2.0
56. 325. 1.	4.1	1.3	3.15	3.55
56. 330. 1.	-	1.1		
56. 334. 1.	2.3	0.7	3.3	1.1
56. 338. 1.	-	1.5		
53. 126. 1.	-	1.3		
53. 136. 1.	4.4	1.1	4.0	3.2
53. 133. 1.	4.5	1.4	3.2	4.2
53. 128. 1.	3.6	1.0	3.6	2.4
53. 129. 1.	-	2.2		
53. 125. 1.	4.2	1.2	3.5	3.4
53. 131. 1.	-	2.0		
53. 132. 2.	2.8	0.7	4.0	1.3
53. 134. 1.	4.4	1.4	3.1	4.1

Table 6 (continued)

No.	length	width	L/W	A
53. 135. 1.	3.9	1.0	3.9	2.6
53. 127. 1.	-	1 7		
53. 137. 1.	4.7	1,6	2.9	5.0
53. 139. 1.	-	1.3		
53. 130. 1.	4.0	1.6	2.5	4.3
53. 142. 1.	4.5	1.5	3.0	4.5
53. 138. 1.	-	1.3		
53. 154. 1.	-	1.0		
53. 155. 1.	-	1.1		
53. 164. 1.	3.6	0.9	4.0	2.2
	-	1.1		
53. 166. 1.	2.0	0.6	3.3	0.8
53. 165. 1.	4.4	1.4	3.1	4.1
53. 173. 1.	-	1.0		
	3.3	0.8	4.1	1.8
53. 150. 1.	3.3	1.0	3.3	2.2
53. 158. 1.	6.3	1.2	5.25	5.0
53. 163. 1.	-	1.7		
53. 172. 1.	3.9	0.8	4.9	2,1
53. 159. 1.	3.1	1.4	2.2	2.9
53. 146. 1.	-	1.7		
53. 147. 1.	-	0.7		
53. 160. 1.	5.7	1.6	3.6	6.1
53. 162. 1.	2.3	1.0	2.3	1.5
53. 161. 1.	-	0.6		
53. 171. 1.	-	0.7		
53. 182. 1.	6.0	1.6	3.75	6.4
53. 188. 1.	4.1	1.4	2.9	3.8
53. 189. 1.	4.6	1.5	3.1	4.6
53. 185. 1.	3.1	0.9	3.4	1.0
53. 198. 1.	4,1	1,2	3.4	3.3
53. 179. 1.	-	1.3		
53. 177. 1.	4.2	2.6	1.6	7.3
53. 184. 1.	-	1.1		
53. 190. 1.	-	1.1		
53. 191. 1.	-	1.1		
53. 195. 1.	-	2.0		
53. 178. 1.	-	2.0		
54. 501. 1.	-	1.5		
54. 509. 1.	3.4	1.1	3.1	2.5
54. 502. 1.	-	1.6		
54. 511. 1.	3.0	1,8	1.7	3.6
54. 510. 1.	2.1	0.6	3.5	0.8
54. 513. 1.	5.5	1.8	3,05	6.6
54. 514. 1.	-	0.8		
	3.1	1.1	2.8	2.3
	-	1.0		
	-	0.8		
54. 515. 1.	4.7	0.8	5.9	2.5
	-	1.5		
	-	1.4		
54. 507. 1.	3.5	1.3	2.7	3.0
54. 521. 1.	4.0	1.0	4.0	2.7
54. 505. 1.	-	0.7		
	-	1.4		
54. 518. 1.	5.6	2.0	2.8	7.5

No.	length	width	L/W	A
54. 520. 1.	3.0	0.6	5,0	1,2
54. 519. 1.	5.7	2.0	2.85	7.6
	-	1.4		
54. 540. 1.	3.7	1.6	2.3	3.9
54. 533. 1.	4.0	1.7	2.35	4.5
	-	2.8		
54. 527. 1.	6.0	1.0	6.0	4.0
54. 539. 1.	-	1.1		
54. 534. 1.	4.7	1.7	2.8	5.3
54. 532. 1.	3.0	1.1	2.7	2.2
54. 526. 1.	-	1.6		
54. 538. 1.	2.2	1.0	2.2	1.5
	4.6	1.6	2.9	4.9
54. 535. 1.	4.8	1.8	2.7	5.8
54. 536. 1.	-	1.7		
54. 537. 1.	-	0.9		
	-	0.8		
54. 530. 1.	6.0	1.8	3.3	7.2
	-	1.3		
54. 524. 1.	6.3	2.2	2.9	9.2
54. 528. 1.	4.1	1.1	2.7	3.0
54. 545. 1.	4.0	1.5	2.7	4.0
54. 557. 1.	4.5	1.2	3.75	3.6
54. 565. 1.	4.8	1.7	2.8	5.4
54. 548. 1.	-	1.2		
	2.2	1.3	1.7	1.9
54. 563. 1.	4.6	1.3	3.5	4.0
54. 554. 1.	-	1.8		
54. 556. 1.	-	1.3		
54. 564. 1.	4.7	1.8	2.6	5.6
54. 560. 1.	3.6	0.8	4,5	1.9
54. 555. 1.	3.5	1.0	3.5	2.3
54. 562. 1.	2.8	1.4	2.0	2.6
54. 544. 1.	4.7	1,7	2.8	5.3
	2.6	0.9	2.9	1.6
54. 566. 1.	3.8	1.2	3.2	3.0
54. 543. 1.	1.9	0.5	3.8	0.6
54. 541. 1.	3.2	1.4	2.3	3.0
	-	1.0		
54. 580. 1.	3.1	0.8	3.9	1.65
54. 573. 1.	3.6	0.8	4.5	1.9
54. 572. 1.	-	1.3		
54. 571. 1.	-	1.6		
54. 585. 1.	2.7	1.2	2.25	2.2
54. 579. 1.	3.5	1.2	2.9	2.8
54. 589. 1.	2.9	1.0	2.9	1.9
54. 576. 1.	4.3	1.2	3.6	3.4
54. 574. 1.	4.3	1.0	4.3	2.9
54. 584. 1.	-	1.7		
54. 911. 3.	-	1.5		
54. 925. 1.	3.2	1.6	2.0	3.4
54. 924. 1.	3.2	1.6	2.0	3.4
54. 920. 1.	5.7	2.2	2.6	8.4
54. 914. 1.	1.7	0.5	2.4	0.6
54. 923. 1.	-	0.9		
54. 913. 1.	3.0	0.9	3.3	1.8

Table 6 (continued)

No.	length	width	L/W	A
54. 922. 1.	5.0	1.5	3.3	5.0
54. 918. 1.	-	0.6		
54. 921. 1.	-	2.2		
54. 936. 1.	4.3	1.1	3.9	3.15
54. 937. 1.	3.7	1.5	2.5	3.7
54. 933. 1.	-	1.3		
54. 928. 1.	4.6	1.1	4.2	3.4
54. 939. 1.	5.7	1.2	4.75	4.6
	5.8	1.8	3.2	7.0
54. 938. 1.	4.2	1.2	3.5	3.4
54. 934. 1.	5.1	1.4	3.6	4.8
54. 930. 1.	2.9	0.9	3.2	1.7
54. 940. 1.	-	2.1		
54. 932. 1.	6.0	0.8	7.5	3.2
54. 931. 1.	4.5	1.5	3.0	4.5
54. 961. 1.	4.8	1.4	3.4	4.5
54. 948. 1.	-	1.9		
54. 952. 1.	-	1.0		
54. 953. 1.	-	1.1		
54. 958. 1.	5.6	1.2	4.7	4.5
54. 947. 1.	4.5	1.0	4.5	3.0
54. 955. 1.	1.2	0.3	4.0	0.2
	1.3	0.3	4.3	0.3
53. 86. 1.	4.6	1.4	3.3	4.3
53. 94. 1.	3.0	0.7	4.3	1.4
53. 91. 1.	3.3	1.0	3.3	2.2
53. 97. 1.	2.6	1.2	2.2	2.1
53. 108. 1.	3.4	1.1	3.1	2.5
53. 84. 1.	-	1.0		
53. 90. 1.	2.8	1.3	2.15	2.4
53. 92. 1.	-	1.4		
53. 98. 1.	4.3	1.0	4.3	2.9
53. 83. 1.	3.3	1.5	2.2	3.3
53. 106. 1.	2.6	1.7	1.5	2.9
53. 89. 1.	-	1.0		
53. 99. 1.	3.0	1.0	3.0	2.0
	3.3	1.3	2.5	2.9
53. 105. 1.	5.0	2.1	2.4	7.0
53. 103. 1.	-	1.7		
53. 111. 1.	-	1.3		
53. 112. 1.	-	2.7		
53. 101. 1.	3.5	1.0	3.5	2.3
53. 88. 1.	1.3	0.6	2.2	0.5
53. 123. 1.	4.0	1.6	2.5	4.3
53. 66. 1.	-	1.2		
53. 68. 1.	2.5	0.9	2.8	1.5
53. 67. 1.	2.1	0.8	2.6	1.1
53. 64. 1.	-	1.8		
53. 70. 1.	5.2	1.3	4.0	4.5
PB	5.0	1.2	4.2	4.0
200/1	6.4	1.0	6.4	4.3
53. 62. 1.	4.8	1.0	4.8	3.2
53. 71. 1.	3.7	0.9	4.1	2.2
53. 81. 1.	-	1.5		
53. 58. 1.	2.5	1.1	2.3	1.8
65. 49. 1.	5.3	1.7	3.1	6.0

No.	length	width	L/W	A
53. 57. 1.	4.0	0.9	4.4	2.4
53. 61. 1.	-	1.5		
53. 72. 1.	-	1.0		
53. 78. 1.	4.0	1.9	2.1	5.1
53. 56. 1.	2.6	1.0	2.6	1.7
53. 55. 1.	2.4	1.1	2.2	1.8
53. 54. 1.	-	1.7		
53. 60. 1.	-	1.5		
53. 73. 1.	2.3	1.0	2.3	1.5
53. 77. 1.	4.5	1.4	3.2	4.2
53. 76. 1.	2.8	1.2	2.3	2.2
53. 52. 1.	2.3	0.9	2.55	1.4
53. 74. 1.	6.6	1.5	4.5	6.8
53. 75. 1.	4.1	1.2	3.4	3.3
53. 49. 1.	-	0.9		
53. 23. 1.	3.8	1.0	3.8	2.5
53. 32. 1.	-	1.1		
53. 34. 1.	4.7	1.5	3.1	4.7
53. 35. 1.	4.3	1.1	3.9	3.15
53. 33. 1.	4.1	1.0	4.1	2.7
53. 47. 1.	-	1.6		
53. 48. 1.	4.7	1.0	4.7	3.1
53. 21. 1.	4.7	1.4	3.35	4.4
53. 30. 1.	5.7	1.5	3.8	5.7
53. 46. 1.	-	1.6		
	-	1.2		
	5.5	1.5	3.7	5.5
53. 36. 1.	3.7	1.0	3.7	2.5
53. 20. 1.	-	0.9		
53. 45. 1.	5.5	1.5	3.7	5.5
	-	2.5		
	2.5	0.9	2.8	1.5
	2.4	1.2	2.0	1.9
53. 26. 1.	3.0	0.7	4.3	1.4
53. 27. 1.	2.3	0.8	2.9	1.2
53. 18. 1.	2.1	1.3	1.6	1.8
53. 24. 1.	1.2	0.4	3.0	0.3
53. 39. 1.	4.8	1.5	3.2	4.8
53. 40. 1.	-	1.8		
53. 41. 1.	4.0	1.3	3.1	3.5
	-	1.2		
53. 44. 1.	3.5	0.9	3.9	2.1
53. 43. 1.	-	1.1		
53. 42. 1.	-	1.2		
56. 873. 2.	1.3	0.5	2.6	0.4
56. 872. 1.	-	1.2		
56. 863. 1.	5.1	1.0	5.1	3.4
56. 871. 1.	6.2	2.1	2.95	8.7
	6.0	2.4	2.5	9.6
56. 861. 1.	3.5	1.2	2.9	2.8
56. 869. 1.	4.5	1.7	2.6	5.1
56. 870. 1.	3.5	1.2	2.9	2.8
59. 616. 1.	3.5	1.1	3.2	2.6
59. 614. 1.	5.0	0.8	6.25	2.7
59. 598. 1.	3.9	1.1	3.5	2.9
59. 599. 1.	4.7	1.8	2.6	5.6

Table 6 (continued)

No.	length	width	L/W	A
59. 611. 1.	4.3	1.3	3.3	3.7
59. 602. 1.	2.6	0.6	4.3	1.0
59. 622. 1.	6.6	2.5	2.6	11.0
59. 608. 1.	3.9	0.9	4.3	2.3
59. 606. 1.	7.0	-		
59. 603. 1.	-	1.1		
59. 607. 1.	4.5	1.2	3.75	3.6
59. 613. 1.	-	1.0		
59. 609. 1.	2.8	1.6	1.75	3.0
59. 605. 1.	4.0	1.5	2.7	4.0
59. 597. 1.	4.3	1.0	4.3	2.9
59. 618. 1.	3.0	1.3	2.3	2.6
63. 185. 1.	-	1.5		
63. 187. 1.	-	1.2		
54. 1258.1.	5.2	1.2	4.3	4.2
54. 581. 1.	5.7	2.5	2.3	9.5
63. 261. 1.	5.5	2.4	2.3	8.8
56. 859. 1.	-	2.5		
54. 980. 1.	3.3	0.5	6.6	1.1
54. 976. 1.	-	2.2		
54. 978. 1.	3.7	1.0	3.7	2.5
54. 969. 1.	3.5	1.9	1.8	4.4
54. 970. 1.	5.2	1.6	3.25	5.5
54. 977. 1.	-	1.0		
54. 966. 1.	4.9	1.3	3.8	4.2
54. 964. 1.	5.2	2.0	2.6	6.9
54. 967. 1.	2.7	1.0	2.7	1.8

No.	length	width	L/W	A
54. 985. 1.	4.3	1.4	3.1	4.0
54. 965. 1.	-	1.2		
54. 962. 1.	5.7	2.1	2.7	8.0
54. 972. 1.	4.3	1.1	3.9	3.15
54. 984. 1.	1.7	0.6	2.8	0.7
54. 2056. 1.	1.3	0.5	2.6	0.4
54. 2035. 1.	4.0	1.8	2.2	4.8
54. 2048. 1.	3.8	1.9	2.0	4.8
54. 2036. 1.	5.2	1.2	4.3	4.2
54. 2050. 1.	3.5	1.3	2.7	3.0
54. 2042. 1.	7.2	1.3	5.5	6.2
54. 2045. 1.	5.1	2.0	2.55	6.8
54. 2046. 1.	6.1	1.5	4.1	6.1
54. 2034. 1.	3.8	2.1	1.8	5.3
54. 2052. 1.	3.6	0.8	4.5	1.9
54. 2054. 1.	2.5	1.0	2.5	1.7
54. 2037. 1.	6.0	1.6	3.75	6.4
54. 2039. 1.	6.0	1.7	3.5	6.8
54. 2038. 1.	5.8	1.3	4.5	5.0
54. 2044. 1.	3.1	0.8	3.9	1.65
54. 2033. 1.	4.8	1.9	2.5	6.1
54. 2030. 1.	6.0	1.9	3.15	7.6
54. 2032. 1.	5.3	1.8	2.9	6.4
54. 2041. 1.	3.8	1.9	2.0	4.8
54. 2043. 1.	3.8	1.2	3.2	3.0
54. 2040. 1.	-	1.8		

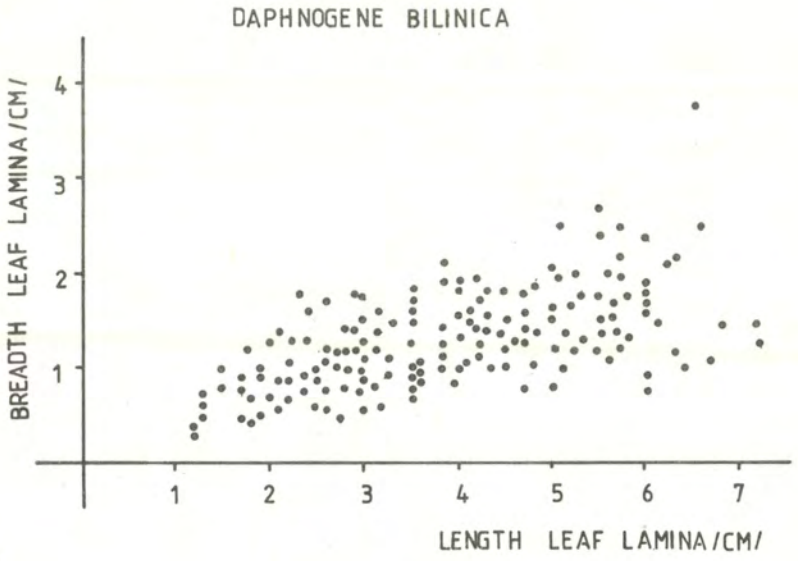


Table 7. Leaf size of Daphnogene cinnamomeifolia

No.	length	width	L/W	A	No.	length	width	L/W	A
54. 946. 1.	4.5	3.4	1.3	10.2	53. 122. 1.	7.5	3.4	2.2	17.0
56. 526. 1.	6.0	3.0	2.0	12.0	53. 119. 1.	8.5	3.5	2.4	20.0

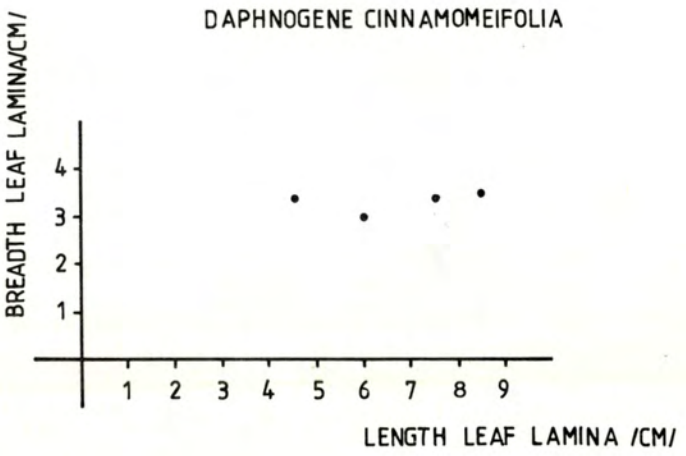


Table 8. Leaf size of Daphnogene cinnamomifolia

No.	length	width	L/W	A
54. 2056. 1.	11.5	4.2	2.7	32.2

Table 9. Leaf size of Daphnogene polymorpha

No.	length	width	L/W	A	No.	length	width	L/W	A
54. 582. 1.	6.1	2.5	2.4	10.2	56. 507. 1.	-	1.8		
54. 586. 1.	6.8	1.6	4.25	7.2	56. 523. 1.	6.5	3.4	2.0	13.9
54. 577. 1.	5.1	1.8	2.8	6.1	56. 517. 1.	6.1	3.0	2.0	12.2
53. 180. 1.	4.2	2.2	1.9	6.2	56. 524. 1.	4.8	2.8	1.7	9.0
53. 176. 1.	4.1	0.8	5.1	2.2	56. 520. 3.	-	4.2		
56. 858. 1.	-	2.8				5.1	2.7	1.9	9.2
56. 522. 1.	5.6	2.3	2.4	8.6	54. 2055.1.	-	2.8		
56. 510. 1.	2.7	1.7	1.6	3.1	54. 590. 1.	4.2	1.5	2.8	4.2
56. 509. 1.	3.0	1.7	1.8	3.4		6.5	2.0	3.25	8.7

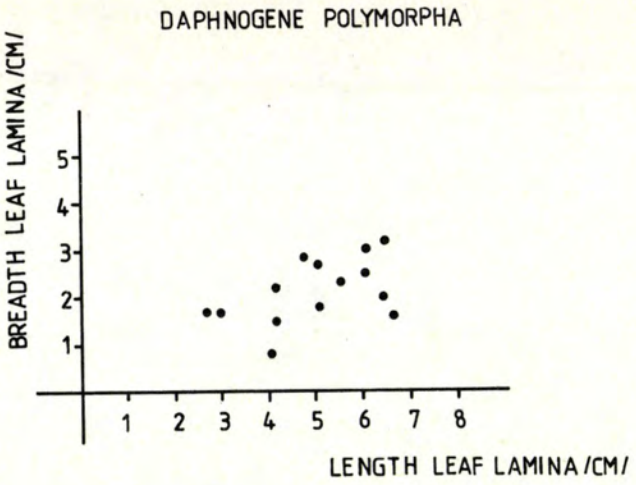


Table 10. Leaf size of Daphnogene spectabile

No.	length	width	L/W	A	No.	length	width	L/W	A
56. 535. 1.	-	4,8			53. 121. 1.	8,0	3,8	2,1	20,3
56. 541. 1.	6.9	4,3	1,6	19,8					

Table 11. Leaf size of Dryophyllum furcinerve

No.	length	width	L/W	A	No.	length	width	L/W	A
54. 1969. 1.	5,0	1,1	4,5	3,7	82. 217. 1.	-	1,3		
54. 1245. 1.	5,3	1,2	4,4	4,2					

Table 12. Leaf size of Elaeocarpus palaeolanceolatus

No.	length	width	L/W	A
82. 418. 1.	4.4	1,9	2.3	5,6

Table 13. Leaf size of Engelhardtia orsbergensis

No.	length	width	L/W	A	No.	length	width	L/W	A
56. 877. 2.	4,0	0.6	6.7	1,6	56. 887. 1.	2.7	0.4	6.75	0.7
	3.5	0,5	7.0	1,2	56. 881. 1.	-	0.6		
56. 876. 1.	5.0	0.5	10.0	1,7	56, 889. 1.	3,7	0,45	8,2	1,1
56. 875. 1.	5.0	0.9	5.55	3,0	56. 890. 1.	6,0	0,9	6,7	3,6
56. 882. 1.	2,9	0,7	4,1	1,35	56. 891. 1.	4.5	0.5	9.0	1,5
56. 878. 1.	5,8	0,9	6,4	3,5	56. 893. 1.	2.8	0,7	4,0	1,3
56. 880. 1.	3.0	0.6	5.0	1,2	56. 894. 1.	3,1	0.6	5,2	1,2
56. 874. 1.	4.7	0,65	7,2	2,0	56. 895. 1.	-	0.6		
56. 883. 1.	2.6	0.6	4.3	1,0		3.0	0,4	7.5	0,8
56. 884. 1.	3,9	0.6	6,5	1.6	56, 898. 1.	5.2	0,9	5,8	3,1
56. 885. 1.	3,3	0.6	5,5	1,3	56. 899. 1.	4.2	0,7	6,0	2.0

Table 13 (continued)

No.	length	width	L/W	A
56. 899. 1.	3 7	0.7	5.3	1.7
	2.7	0.6	4.5	1.1
56. 897. 1.	2.7	0.6	4.5	1.1
56. 896. 1.	-	0.7		
56. 908. 1.	1.7	0.3	5.7	0.3
56. 907. 1.	4.3	0.4	10.75	1.1
56. 906. 1.	-	1.0		
56. 903. 1.	3.8	0.8	4.75	2.0
56. 904. 1.	3.5	0.6	5.8	1.4
	-	0.75		
56. 905. 1.	4.6	0.7	6.6	2.1
56. 914. 1.	1.8	0.3	6.0	0.4
56. 913. 1.	3.8	0.8	4.75	2.0
56. 912. 1.	4.5	0.9	5.0	2.7
56. 917. 1.	3.6	0.6	6.0	1.4
56. 916. 1.	4.7	1.0	4.7	3.1
56. 915. 1.	5.0	0.7	7.1	2.3
56. 910. 1.	4.8	0.5	9.6	1.6
	-	0.5		
	-	0.5		
56. 909. 1.	7.4	1.0	7.4	4.9
56. 938. 1.	-	0.8		
56. 937. 1.	4.0	0.8	5.0	2.1
56. 934. 1.	5.2	0.7	7.4	2.4
56. 930. 1.	5.6	1.2	4.7	4.5
56. 933. 1.	-	0.6		
56. 928. 1.	5.0	0.85	5.9	2.8
56. 924. 1.	3.2	0.6	5.3	1.3
56. 925. 1.	-	1.0		
56. 926. 1.	2.5	0.7	3.6	1.2
56. 918. 1.	3.3	0.7	4.7	1.5
	-	0.7		
56. 922. 1.	6.0	1.2	5.0	4.8
56. 923. 1.	-	1.1		
56. 942. 1.	3.5	0.8	4.4	1.9
56. 943. 1.	4.8	0.85	5.6	2.7
56. 944. 1.	3.5	0.8	4.4	1.9
56. 949. 1.	3.7	0.5	7.4	1.2
	3.7	0.3	12.3	0.7
	4.1	0.6	6.8	1.6
56. 948. 1.	5.0	1.0	5.0	3.3
56. 947. 1.	3.0	0.5	6.0	1.0
	3.0	0.5	6.0	1.0
	2.7	0.45	6.0	0.8
56. 946. 1.	4.5	0.9	5.0	2.7
56. 945. 1.	3.5	0.6	5.8	1.4
56. 956. 1.	4.0	0.5	8.0	1.3
	4.6	0.7	6.6	2.1
56. 954. 1.	4.3	0.6	7.2	1.7
	3.6	0.6	6.0	1.4
	4.0	0.6	6.7	1.6
56. 953. 1.	3.9	0.6	6.5	1.6
	3.7	0.9	4.1	2.2
	4.5	0.6	7.5	1.8
	4.0	0.6	6.7	1.6

No.	length	width	L/W	A
56. 950. 1.	4.7	0.6	7.8	1.9
	4.0	0.5	8.0	1.3
56. 962. 3.	3.0	0.6	5.0	1.2
56. 958. 1.	3.0	0.6	5.0	1.2
56. 964. 1.	4.0	0.8	5.0	2.1
56. 968. 1.	3.0	0.6	5.0	1.2
56. 969. 1.	2.8	0.6	4.7	1.1
56. 970. 1.	3.8	0.5	7.6	1.3
56. 966. 1.	3.0	0.6	5.0	1.2
56. 971. 1.	3.0	0.6	5.0	1.2
	2.5	0.45	5.55	0.75
56. 972. 1.	4.0	0.65	6.15	1.7
56. 973. 1.	3.5	0.8	4.4	1.9
	2.8	0.5	5.6	0.9
56. 977. 1.	4.0	0.45	8.9	1.2
	3.9	0.5	7.8	1.3
56. 978. 1.	3.6	0.5	7.2	1.2
56. 981. 1.	4.0	0.7	5.7	1.9
56. 984. 1.	4.3	0.7	6.1	2.0
56. 986. 1.	3.5	0.65	5.4	1.5
56. 987. 1.	2.3	0.5	4.6	0.8
	5.0	0.7	7.1	2.3
56. 994. 1.	3.7	0.65	5.7	1.6
56. 993. 1.	4.0	0.75	5.3	2.0
56. 992. 1.	2.5	0.45	5.55	0.75
56. 991. 1.	2.5	0.45	5.55	0.75
56. 1002. 1.	5.6	1.2	4.7	4.5
56. 996. 1.	3.5	0.5	7.0	1.2
56. 995. 1.	2.8	0.5	5.6	0.9
56. 1007. 1.	4.6	0.7	6.6	2.1
56. 1005. 1.	-	0.8		
56. 1004. 1.	4.5	1.1	4.1	3.3
58. 512. 1.	4.0	0.7	5.7	1.9
58. 513. 1.	4.1	0.6	6.8	1.6
58. 506. 2.	4.3	0.65	6.6	1.9
58. 505. 1.	2.2	0.5	4.4	0.7
58. 502. 1.	4.5	0.75	6.0	4.5
58. 501. 1.	2.7	1.0	2.7	1.8
58. 500. 1.	4.0	-		
58. 498. 1.	4.5	-		
58. 491. 1.	4.2	0.7	6.0	2.0
58. 490. 1.	4.7	0.75	6.3	2.35
58. 529. 1.	3.8	0.5	7.6	1.3
58. 532. 1.	5.5	2.2	2.5	8.1
	2.2	0.3	7.3	0.4
58. 530. 1.	3.0	0.95	3.15	1.9
58. 535. 1.	4.2	0.5	8.4	1.4
58. 548. 1.	4.3	0.9	4.8	2.6
58. 541. 1.	5.8	-		
58. 542. 1.	5.8	1.6	3.6	6.2
58. 544. 1.	5.4	1.35	4.0	4.9
58. 547. 1.	7.0	1.15	6.1	5.4
	4.7	1.05	4.5	3.3
54. 2006. 1.	3.7	0.6	6.2	1.5
54. 2004. 1.	-	0.6		

Table 13 (continued)

No.	length	width	L/W	A
54. 2005. 1.	2,3	0.65	3.5	1.0
54. 2024. 1.	4.3	0.7	6,1	2.0
54. 2012. 1.	-	0.45		
54. 2007. 1.	4.4	0,8	5.5	2,3
54. 2021. 1.	2,6	0.4	6,5	0,7
54. 2009. 1.	3,0	0,5	6.0	1.0
54. 2017. 1.	-	0.5		
54. 2016. 1.	-	1,0		
54. 2027. 1.	5,2	1,1	4.7	3,8
54. 2003. 1.	4.1	0,8	5.1	2,2
54. 2015. 1.	3,3	0,6	5,5	1.3
54. 1985. 1.	2,5	0.4	6.25	0,7
54. 1986. 1.	3,5	0,5	7,0	1,2
54. 1988. 1.	3,3	0,55	6,0	1,2
54. 1992. 1.	3,2	0,7	4,6	1,5
54. 1993. 1.	2.5	0.4	6,25	0,7
54. 1996. 1.	3,3	0,8	4,1	1,8
54. 1999. 1.	4,0	0,7	6,7	1,9
54. 2000. 1.	3,3	0,65	5,1	1,4
54. 1978. 1.	4,3	0.95	4,5	2,7
54. 1979. 1.	2,2	0,6	3,7	0,9
54. 1982. 1.	-	1,0		
54. 1984. 1.	3,8	0,6	6,3	1,5
54. 1977. 1.	4,0	0,8	5,0	2,1
54. 1966. 1.	4.5	1,05	4,3	3.15
54. 1968. 1.	3.2	0,6	5.3	1.3
54. 1962. 1.	3.2	0.65	4,9	1,4
54. 1956. 1.	6,1	0,8	7,6	3,25
54. 1957. 1.	2,9	0,5	5,8	1,0
54. 1975. 1.	-	0.9		
54. 1974. 1.	4.0	-		
54. 1976. 1.	4,3	0.9	4,8	2,6
	3,0	0,8	3,75	1,6
54. 1963. 1.	3,2	0,6	5,3	1.3
54. 1964. 1.	3,2	0,6	5,3	1.3
54. 1965. 1.	4,3	0,8	5.4	2,3
	-	0,7		
54. 1952. 1.	3,2	0,5	6,4	1,1
54. 1970. 1.	4.5	1,0	4,5	3,0
54. 1972. 1.	3,8	0,6	6.3	1,5
54. 1955. 1.	2,8	0,7	4,0	1,3
54. 1954. 1.	5,5	-		
54. 1960. 1.	-	0.9		
54. 1946. 1.	-	0,65		
54. 1943. 1.	4,0	0,9	4.4	2,4
54. 1942. 1.	-	0.5		
54. 1941. 1.	4,2	0,8	5,25	2,2
54. 1253. 1.	3,8	0,6	6.3	1,5
54. 1257. 1.	5,5	1,0	5,5	3,7
54. 1947. 1.	5.7	0,95	6,0	3.6
	5.5	0.9	6.1	3.3
	4,8	0,9	5,3	2.9
	-	0,7		
54. 1258. 1.	5,6	0.9	6.2	3.4
54. 1256. 1.	-	1,2		
54. 1254. 1.	5.5	0,95	5,8	3.5

No.	length	width	L/W	A
54. 1252. 1.	3.6	0,6	6.0	1.4
54. 1241. 1.	4.0	0.65	6,15	1,7
54. 1229. 1.	4.3	0.7	6.1	2.0
	3.8	0.7	5.4	1,8
54. 1230. 1.	5.2	0,7	7.4	2,4
54. 1237. 1.	-	0,6		
54. 1234. 1.	2,7	0.5	5.4	0.9
54. 1247. 1.	3.0	0,6	5,0	1,2
54. 1244. 1.	3,5	0.4	8,75	0.9
54. 1236. 1.	5.5	-		
54. 1239. 1.	2.5	0.5	5,0	0.8
54. 1227. 1.	4,3	0,8	5,4	2,3
54. 1228. 1.	-	0.8		
54. 1223. 1.	3,7	0.45	8,2	1,1
54. 1224. 1.	-	0.4		
54. 1216. 1.	4,5	0.8	5,6	2,4
54. 1217. 1.	3,7	0.65	5,7	1,6
54. 1215. 1.	5,0	0,8	6,25	2,7
54. 1213. 2.	5,4	0.8	6,75	2,9
54. 1212. 1.	4.7	0.5	9,4	1,6
54. 1211. 1.	4,8	0.6	8,0	1,9
54. 1210. 1.	4,4	0,8	5,5	2,3
54. 1186. 1.	3,3	-		
54. 1193. 1.	3,2	0.5	6,4	1,1
54. 1187. 1.	5,0	-		
54. 1209. 1.	4,6	0.5	9.2	1,5
54. 1198. 1.	5,2	0,7	7,4	2,4
54. 1199. 1.	2,8	0,4	7,0	0,7
54. 1200. 1.	3,2	0,5	6.4	1,1
	2.8	0,4	7,0	0,7
	1.8	0.35	5,1	0.4
54. 1207. 1.	-	0.5		
54. 1204. 1.	3,0	0.5	6,0	1,0
	2.8	0.4	7,0	0,7
	2,0	0.35	5,7	0.5
	1,7	0,3	5,7	0.3
54. 1202. 1.	2,5	0,45	5.55	0,75
54. 1157. 1.	5.5	1,0	5,5	3,7
54. 1164. 1.	4.0	0.5	8,0	1,3
54. 1161. 1.	4.5	0,6	7,5	1,8
54. 1162. 1.	3,7	0.5	7,4	1,2
54. 1163. 1.	3,0	0.4	7,5	0.8
54. 1170. 1.	6,0	0.6	10,0	2,4
54. 1178. 1.	-	0,8		
54. 1173. 1.	4,3	0.7	6,1	2,0
54. 1175. 1.	4.5	0.5	9.0	1,5
54. 1176. 1.	-	0.45		
54. 1184. 1.	4,0	0.5	8.0	1,3
54. 1183. 1.	3,0	0.4	7.5	0.8
54. 1182. 1.	-	0.35		
54. 1180. 1.	4,7	0,8	5,9	2,5
54. 1179. 1.	3,0	0.4	7.5	0.8
54. 2075. 1.	4.0	0.6	6.7	1.6
54. 1140. 2.	4,8	0,7	6,85	2,2
	4.0	0.7	5,7	1,9
54. 1145. 1.	5,3	0,9	5,9	3,2

Table 13 (continued)

No.	length	width	L/W	A	No.	length	width	L/W	A
54. 1137. 1.	4.6	0.9	5.1	2.8	54. 1156. 1.	4.2	0.9	4.7	2.5
54. 1136. 1.	4.5	0.7	6.4	2.1	54. 1132. 1.	4.7	0.9	5.2	2.8
54. 1135. 1.	-	0.7			54. 1128. 1.	4.5	0.6	7.5	1.8
54. 1147. 1.	5.0	0.7	7.1	2.3	54. 1126. 1.	4.2	-		
	4.0	0.6	6.7	1.6	54. 1127. 1.	4.2	0.8	5.25	2.2
54. 1143. 1.	4.2	1.0	4.2	2.8	54. 1117. 1.	4.0	0.6	6.7	1.6
	3.8	0.5	7.6	1.3	54. 1118. 1.	4.0	0.6	6.7	1.6
54. 1142. 1.	-	1.1			54. 1122. 1.	4.4	0.6	7.3	1.8
54. 1141. 1.	5.0	0.7	7.1	2.3	54. 1121. 1.	5.5	0.9	6.1	3.3
54. 1154. 1.	4.3	0.6	7.2	1.7	54. 1120. 1.	4.2	0.6	7.0	1.7
54. 1148. 1.	4.8	0.8	6.0	2.6	54. 1112. 1.	4.2	0.6	7.0	1.7
	4.4	0.6	7.3	1.8	56, 255. 1.	4.2	0.5	8.4	1.4
54. 1153. 1.	3.0	0.45	6.7	0.9	56. 245. 1.	2.5	0.6	4.2	1.0
54. 1150. 1.	4.6	0.7	6.6	2.1	54. 2066. 1.	3.0	0.5	6.0	1.0

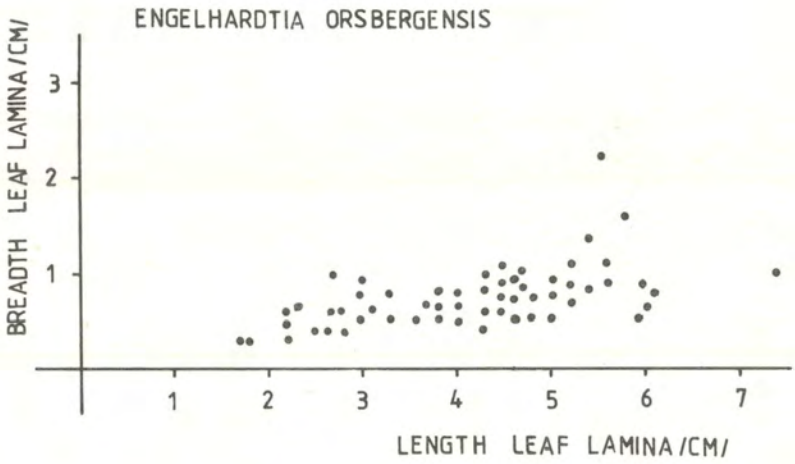


Table 14. Leaf size of Laurophyllum heeri

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 431. 1.	8.0	3.5	2.3	18.7	82. 443. 1.	10.0	4.3	2.3	14.3
82. 432. 1.	-	4.0			82. 444. 1.	8.3	3.1	2.7	17.15
82. 436. 1.	-	4.5			82. 445. 1.	-	4.5		
82. 437. 1.	8.6	3.4	2.5	19.5	82. 446. 1.	-	3.6		
82. 438. 2.	9.5	5.0	1.9	31.7	82. 449. 1.	12.3	5.2	2.4	42.6
	8.0	4.7	1.7	25.1	65. 8. 1.	9.0	4.5	2.0	27.0
82. 439. 1.	-	5.1			65. 2. 1.	7.7	3.2	2.4	16.4
82. 440. 1.	9.6	3.4	2.8	21.8	65. 9. 1.	13.0	7.0	1.9	60.7
82. 441. 1.	-	0.5			59. 1494. 1.	14.0	4.3	3.25	40.1
	8.6	5.5	1.6	31.5	65. 1. 1.	9.6	3.9	2.5	25.0
82. 442. 2.	-	4.2			59. 1495. 1.	-	4.6		
82. 443. 1.	-	4.0			82. 455. 1.	-	3.7		

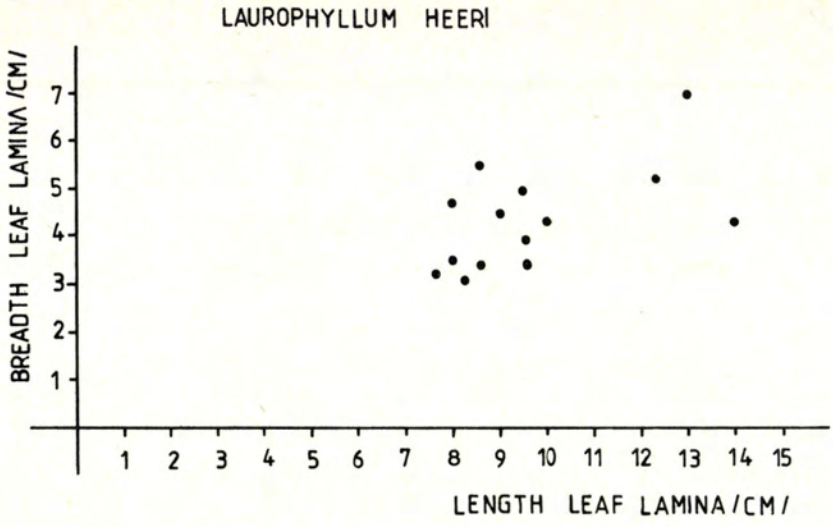


Table 15. Leaf size of Laurophyllum pseudoprinceps

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 457. 1.	10.0	2.6	3.8	17.3	32. 459. 1.	-	2.1		
82. 458. 2.	8.5	2.6	3.3	14.7	82. 460. 1.	5.5	1.8	3.1	6.6

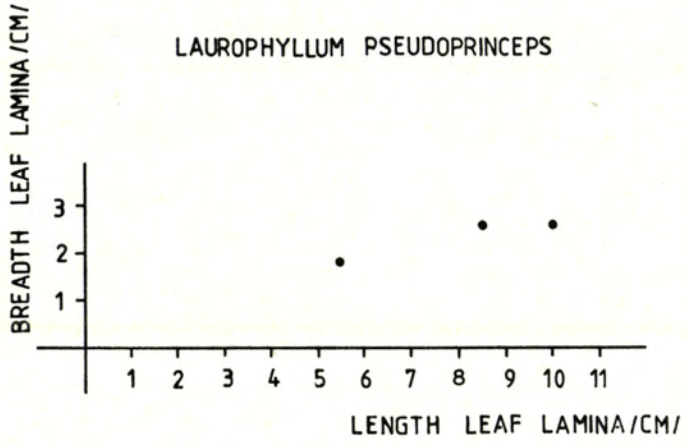


Table 16. Leaf size of "Laurus" primigenia

No.	length	width	L/W	A
82. 409. 1.	10.5	3.0	3.5	21.0
82. 410. 1.	12.0	3.6	3.3	28.8
82. 411. 1.	9.8	2.9	3.4	18.9
82. 412. 1.	11.5	2.7	4.25	20.7
	-	2.2		
82. 413. 2.	12.0	3.5	3.4	28.0
82. 414. 1.	7.0	2.8	2.5	13.1
	-	1.0		
82. 415. 1.	9.5	2.7	3.5	17.1

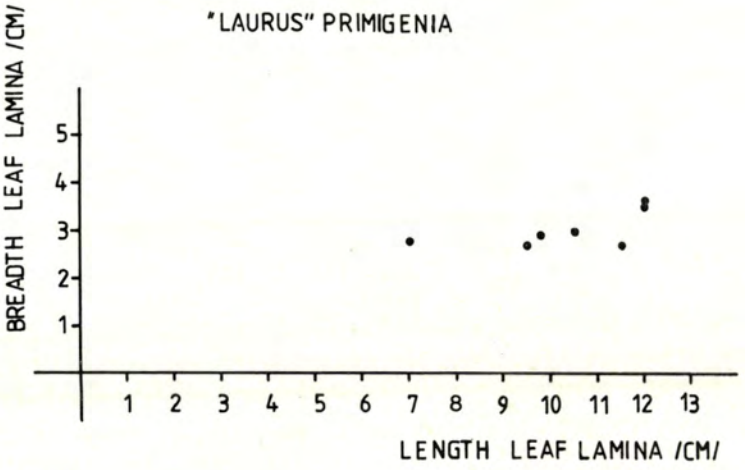


Table 17. Leaf size of Laurus princeps

No.	length	width	L/W	A
82. 332. 1.	7.3	3.0	2.4	14.6
82. 333. 1.	-	3.2		
	6.0	2.8	2.1	11.2
82. 334. 1.	5.6	3.0	1.9	11.2
82. 335. 1.	5.5	2.5	2.2	9.2
82. 336. 1.	6.0	2.4	2.5	9.6
82. 337. 1.	-	1.6		
	-	2.5		
82. 338. 1.	3.6	2.3	1.6	5.5
	6.5	2.2	1.95	9.5
82. 339. 1.	8.0	3.9	2.05	20.8
82. 340. 1.	-	2.1		
82. 341. 1.	4.0	2.1	1.9	5.6
82. 342. 1.	-	2.9		
	-	2.0		
82. 343. 1.	3.8	2.3	1.65	5.8
82. 344. 1.	-	2.1		
82. 346. 1.	-	2.0		
82. 347. 1.	6.2	2.3	2.7	9.5
82. 348. 1.	-	2.0		
82. 349. 1.	-	2.1		
82. 350. 1.	3.9	2.0	1.95	5.2
82. 351. 1.	5.7	2.6	2.2	9.9
82. 352. 1.	6.0	2.4	2.5	9.6
82. 353. 1.	5.5	2.2	2.5	8.1
82. 354. 1.	-	1.8		
	-	2.0		
82. 355. 1.	-	2.7		
	6.9	2.5	2.8	11.5
82. 356. 1.	7.6	2.9	2.6	14.7
82. 357. 1.	5.0	3.2	1.6	10.7
82. 358. 1.	6.3	2.8	2.25	11.8
82. 359. 1.	-	3.2		
	-	2.2		
82. 306. 1.	7.3	2.7	2.7	13.1
82. 307. 1.	-	4.7		
82. 309. 2.	8.5	1.9	4.5	10.8
82. 310. 1.	-	3.0		
82. 311. 1.	5.5	2.4	2.3	8.8
82. 312. 1.	5.4	2.3	2.3	8.3
82. 313. 1.	6.2	1.9	3.3	7.85
	7.8	2.6	3.0	13.5

Table 17 (continued)

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 314. 1.	-	3.1			82. 325. 1.	6.0	2.1	2.85	8.4
82. 315. 1.	4.0	1.6	2.5	4.3	82. 326. 1.	5.8	2.2	2.6	8.5
	5.0	1.6	3.1	5.3	82. 327. 1.	6.7	2.5	2.7	11.2
82. 316. 1.	6.4	3.2	2.0	13.7		6.7	2.3	2.9	10.3
82. 317. 1.	3.3	1.3	2.5	2.9		6.0	2.3	2.6	9.2
82. 318. 1.	8.2	2.9	2.8	15.85	82. 328. 1.	-	2.8		
82. 319. 1.	7.4	2.3	3.2	11.3	82. 329. 1.	6.0	2.8	2.1	11.2
82. 320. 1.	5.3	2.3	2.3	8.1	82. 330. 1.	-	3.0		
82. 321. 1.	5.0	2.6	1.9	8.7	82. 331. 1.	8.1	2.9	2.8	15.7
82. 322. 1.	8.0	3.1	2.6	16.5	82. 424. 1.	3.2	1.7	1.9	3.6
82. 323. 1.	-	3.0			82. 425. 1.	3.2	1.6	2.0	3.4
	8.4	3.6	2.3	20.2	82. 456. 1.	-	3.0		
82. 324. 1.	-	2.0							

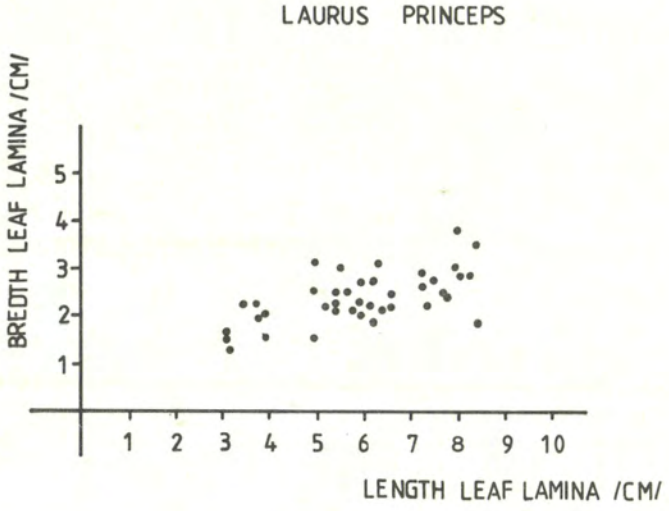


Table 18. Leaf size of Litsea ipolytarnocense

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 302. 1.	-	5.0			82. 417. 1.	9.0	5.3	1.7	31.8
82. 297. 1.	-	3.8			82. 419. 1.	6.9	3.6	1.9	16.6
82. 296. 1.	-	6.1			82. 422. 1.	-	3.9		
82. 284. 1.	-	2.6			82. 423. 1.	-	3.0		
82. 416. 1.	8.2	4.4	1.9	24.05	82. 426. 1.	-	3.0		

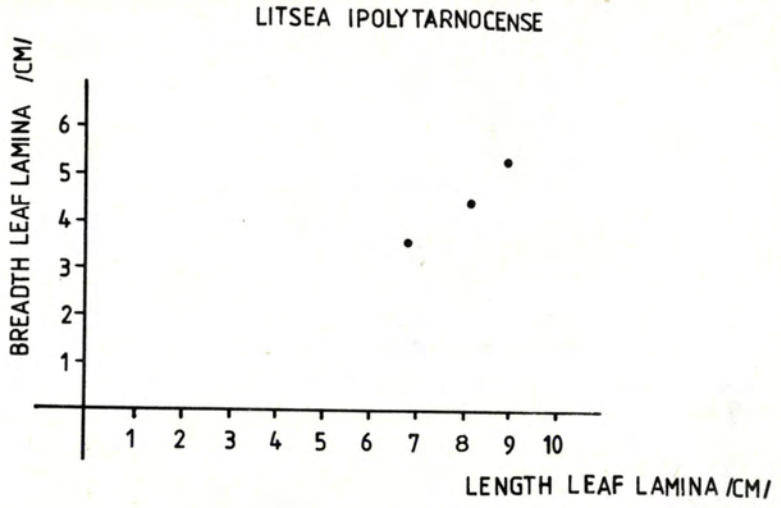


Table 19. Leaf size of Magnolia dianae

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 461. 1.	10.0	4.8	2.1	32.0	82. 466. 1.	11.0	5.2	2.1	38.1
82. 462. 1.	-	5.6			82. 467. 2.	14.0	5.6	2.5	52.3
82. 463. 2.	-	5.0			82. 468. 1.	-	4.2		
82. 464. 1.	10.8	4.6	2.3	33.1		-	4.0		
82. 465. 1.	11.0	5.2	2.1	38.1	82. 470. 1.	11.0	4.4	2.5	32.3

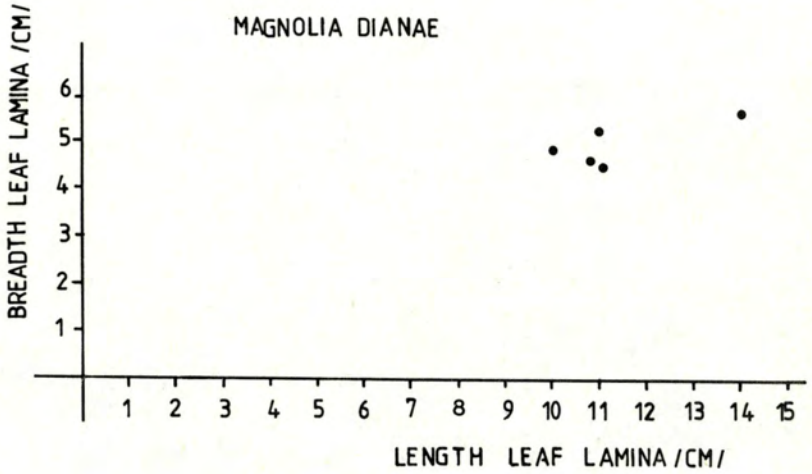


Table 20. Leaf size of Magnolia mirabilis

No.	length	width	L/W	A
82. 379. 1.	11.0	5.7	1.9	41.8

Table 21. Leaf size of Myrtophyllum sp.

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 304. 1.	4.0	1.0	4.0	2.7	82. 387. 1.	3,5	1.0	3.5	2.3
82. 305. 1.	3.4	1.0	3.4	2.3	82. 388. 1.	5.0	1.2	4.2	4.0
	5,0	1.4	3.6	4.7	82. 389. 1.	2.0	0.8	2.5	1.1
82. 386. 1.	3.0	0.9	3.3	1.8					

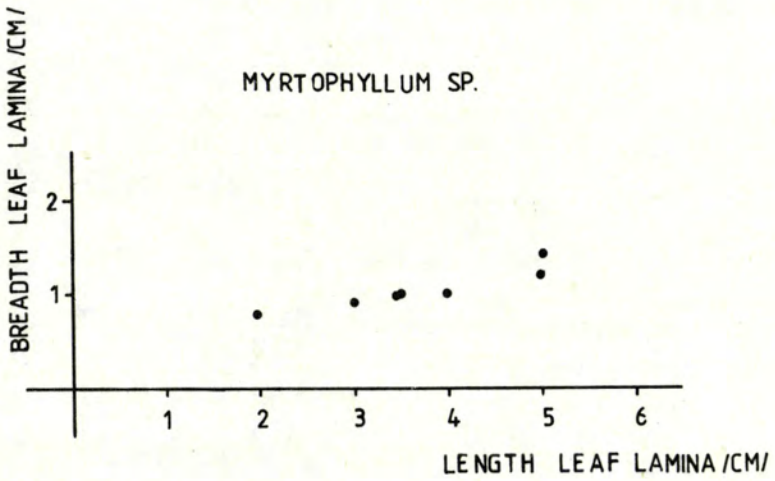


Table 22. Leaf size of Persea braunii

No.	length	width	L/W	A	No.	length	width	L/W	A
MÁFI 82.220.1.	10.0	5.3	1.9	35.3	82. 223. 1.	8.3	4.8	1.7	26.6
82.221.1.	7.5	4.0	1.9	20.0	82. 224. 1.	-	4.6		
82.222.1.	7.3	4.5	1.6	21.9	82. 225. 1.	4.7	3.4	1.4	10.65

Table 23. Leaf size of Platanus neptuni

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 109. 1.	12.2	4.0	3.05	32.5		4.5	1.5	3.0	4.5
	11.8	3,5	3.4	27.5		-	3.0		
82. 34. 1.	8.8	2.2	4.0	12.9		-	4.0		
	6.8	1.8	3,8	8.2	82. 32. 1.	8,0	2.8	2.85	14.9
	10.5	3.6	2.9	25.2		6,0	2.6	2.3	10.4
82. 35. 1.	7.5	2.4	3.1	12.0		-	2.8		
	2.5	0.9	2.8	1.85	82. 6. 1.	5.1	1.6	3.2	5,4

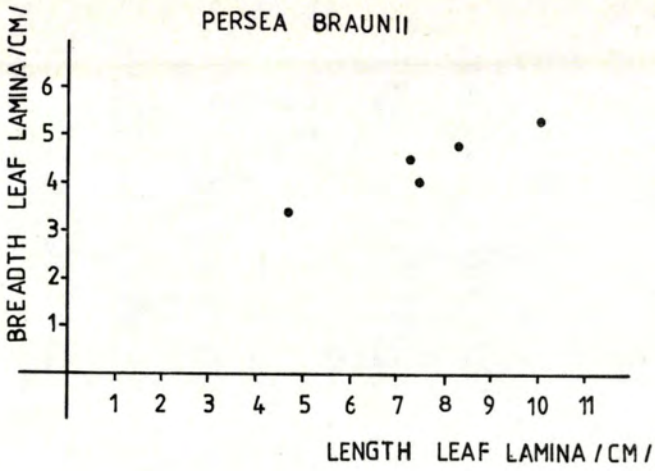


Table 23 (continued)

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 108. 1.	-	3.6			82. 47. 1.	7.0	3.2	2.2	14.9
82. 101. 1.	7.3	2.3	3.2	11.2	82. 45. 1.	7.2	2.3	3.1	11.0
82. 37. 1.	6.7	2.9	2.3	12.95	82. 56. 1.	6.2	2.0	3.1	8.3
82. 36. 1.	-	2.8			82. 43. 1.	7.4	3.0	2.5	14.8
	-	2.6			82. 48. 1.	8.0	2.6	3.1	13.9
82. 41. 2.	7.6	2.6	2.9	13.2	82. 57. 1.	7.0	2.6	2.7	12.1
82. 40. 1.	4.3	1.2	3.6	3.4	82. 64. 1.	9.4	3.5	2.7	21.9
82. 38. 1.	7.0	2.5	2.8	11.7		8.7	3.6	2.4	20.9
82. 30. 1.	8.0	2.4	3.3	12.8	82. 55. 1.	6.5	3.3	1.9	14.3
	5.2	1.6	3.25	5.5	82. 49. 1.	-	3.8		
82. 33. 1.	8.8	3.2	2.75	18.8	82. 52. 1.	7.8	3.4	2.3	17.7
82. 29. 1.	7.9	2.8	2.8	14.7	82. 63. 1.	6.3	1.8	3.5	7.6
82. 31. 1.	6.0	2.9	2.1	11.6	82. 62. 1.	-	2.8		
82. 42. 1.	8.0	3.0	2.7	16.0	82. 59. 1.	8.6	2.4	3.6	13.8
	8.8	3.6	2.4	21.1	82. 65. 1.	9.0	3.5	2.6	21.0
82. 27. 1.	5.3	1.4	3.8	4.9		3.4	0.9	3.8	2.0
82. 11. 1.	8.5	2.9	2.9	16.4		1.7	0.8	2.1	0.9
82. 12. 1.	7.4	2.2	3.4	10.85	82. 79. 1.	-	3.8		
82. 13. 1.	6.0	2.0	3.0	8.0	82. 66. 1.	6.1	2.1	2.9	8.5
82. 14. 1.	8.2	2.7	3.0	14.8	82. 81. 1.	3.9	1.1	3.5	2.9
82. 15. 2.	6.9	2.3	3.0	10.6	82. 78. 1.	-	3.8		
82. 16. 1.	8.8	2.1	4.2	12.3		-	3.6		
82. 17. 1.	6.7	1.7	3.9	7.6	82. 77. 1.	7.8	3.0	2.6	15.6
82. 19. 1.	8.0	2.7	2.9	14.4		3.8	0.8	4.75	2.0
82. 20. 1.	-	2.7			82. 69. 1.	-	4.4		
	3.0	0.9	3.3	1.8	82. 74. 1.	-	2.9		
82. 23. 1.	4.8	1.6	3.0	5.1	82. 70. 1.	8.5	3.3	2.6	18.7
	3.6	1.1	3.3	2.6	82. 73. 1.	5.2	1.8	2.9	6.2
	10.0	4.0	2.5	26.7	82. 76. 1.	-	4.0		
82. 24. 1.	8.0	3.2	2.5	17.1	82. 75. 1.	-	3.2		
82. 25. 1.	7.5	3.0	2.5	15.0	82. 83. 1.	9.5	3.5	2.7	22.2
82. 46. 1.	10.3	3.1	3.3	21.3	82. 84. 1.	7.0	2.1	3.3	9.8

Table 23 (continued)

No.	length	width	L/W	A
82. 85. 1.	10.0	2.5	4.0	16.7
82. 86. 1.	9.5	3.0	3.2	19.0
82. 87. 1.	8.7	2.8	3.1	16.2
82. 90. 1.	6.5	1.9	3.4	8.2
82. 91. 1.	10.5	4.0	2.6	28.0
82. 92. 1.	8.0	2.0	4.0	10.7
	3.0	1.2	2.5	2.4
82. 93. 1.	9.5	3.0	3.2	19.0
82. 94. 1.	9.0	4.0	2.25	24.0
82. 95. 1.	7.5	2.5	3.0	12.5
82. 96. 1.	8.3	3.2	2.6	17.7
82. 1. 1.	12.0	4.2	2.85	33.6
82. 2. 1.	7.8	3.2	2.4	16.6
82. 3. 1.	8.0	2.8	2.85	14.9
82. 98. 1.	8.5	2.5	3.4	14.2
82. 4. 1.	8.5	2.8	3.0	15.9
82. 103. 1.	9.0	2.6	3.5	15.6
82. 104. 1.	7.1	2.2	3.2	10.4
82. 106. 1.	6.0	1.65	3.6	6.6
82. 102. 1.	8.0	2.8	2.85	14.9
82. 101. 1.	9.5	3.5	2.7	22.2
82. 100. 1.	7.5	2.2	3.4	11.0
82. 99. 1.	6.0	1.5	4.0	6.0
82. 7. 1.	8.3	3.0	2.8	16.6
82. 8. 1.	10.0	3.0	3.3	20.0
82. 9. 1.	8.5	2.8	3.0	15.9
82. 10. 1.	8.0	2.7	2.9	14.4
82. 113. 1.	8.5	2.3	3.7	13.0
82. 112. 1.	8.8	2.6	3.4	15.25
	-	3.8		
82. 126. 1.	8.8	2.5	3.5	14.7
82. 120. 1.	4.1	1.1	3.7	3.0
82. 121. 1.	10.8	3.5	3.1	25.2
82. 118. 1.	4.7	1.3	3.6	4.1
82. 117. 1.	-	3.0		
82. 110. 1.	4.2	1.8	2.3	5.0
82. 119. 1.	8.8	3.7	2.4	21.7
82. 122. 1.	7.8	2.3	3.4	12.0
82. 116. 1.	2.5	0.95	2.6	1.6
	4.5	1.5	3.0	4.5
82. 111. 1.	9.3	3.8	2.4	23.6
82. 123. 1.	7.8	-		
82. 114. 1.	9.5	3.0	3.2	19.0
82. 115. 1.	11.0	3.8	2.9	27.9
	6.7	3.85	1.7	17.2
	13.0	4.2	3.1	36.4
82. 143. 1.	5.3	1.5	3.5	5.3
82. 131. 1.	7.0	3.0	2.3	14.0
82. 132. 1.	7.5	2.9	2.6	14.5
82. 139. 1.	9.5	2.9	3.3	18.4
82. 135. 1.	5.0	2.2	2.3	7.3
82. 146. 1.	5.3	1.6	3.3	5.65
82. 137. 1.	6.0	2.2	2.7	8.8

No.	length	width	L/W	A
82. 147. 1.	2.9	1.1	2.6	2.1
82. 164. 1.	8.0	3.0	2.7	16.0
82. 153. 1.	4.4	2.9	1.5	8.5
82. 157. 1.	8.5	2.8	3.0	15.9
82. 154. 1.	3.7	1.1	3.4	2.7
82. 156. 1.	12.0	4.4	2.7	35.2
82. 163. 1.	-	3.8		
	8.8	2.9	3.0	17.0
82. 151. 1.	-	3.3		
82. 161. 1.	-	3.5		
82. 155. 1.	7.6	2.7	2.8	13.7
82. 188. 1.	5.2	2.0	2.6	6.9
82. 187. 1.	6.0	1.9	3.15	7.6
82. 186. 1.	4.9	1.8	2.7	5.9
82. 185. 1.	7.0	2.5	2.8	11.7
82. 182. 1.	8.8	2.9	3.0	17.0
82. 181. 1.	8.9	2.8	3.2	16.6
82. 177. 1.	5.2	1.8	2.9	6.2
82. 175. 1.	-	3.0		
82. 183. 1.	-	2.9		
82. 176. 1.	6.6	2.0	3.3	8.8
	-	3.0		
82. 184. 1.	4.3	1.85	2.3	5.3
82. 192. 1.	8.3	2.6	3.2	14.4
82. 199. 1.	7.0	2.4	2.9	11.2
82. 196. 1.	-	2.0		
82. 198. 1.	8.5	2.4	3.5	13.6
82. 197. 1.	7.6	2.2	3.45	11.1
82. 206. 1.	9.2	3.2	2.9	19.6
82. 203. 1.	2.9	0.8	3.6	1.5
82. 204. 1.	6.7	2.0	3.35	8.9
82. 202. 1.	8.3	2.4	3.45	13.3
82. 201. 1.	5.2	2.0	2.6	6.9
82. 189. 1.	6.5	2.3	2.8	10.0
	1.9	0.8	2.4	1.0
	7.8	2.4	3.25	12.5
	-	3.4		
	-	2.35		
82. 207. 2.	6.3	1.5	4.2	6.3
82. 208. 2.	4.0	1.0	4.0	2.7
82. 210. 1.	7.5	2.5	3.0	12.5
82. 211. 1.	10.0	2.9	3.4	19.3
82. 212. 1.	7.5	2.5	3.0	12.5
82. 213. 1.	8.2	2.4	3.4	13.1
82. 215. 1.	8.5	3.0	2.8	17.0
82. 377. 1.	9.5	3.6	2.6	22.8
82. 378. 1.	-	4.0		
82. 380. 1.	6.5	3.8	1.7	16.5
82. 451. 1.	12.3	4.7	2.6	38.5
82. 452. 1.	9.0	4.0	2.25	24.0
82. 377. 1.	2.5	3.6	0.7	6.0
82. 378. 1.	-	4.0		
82. 380. 1.	6.5	3.8	1.7	16.5

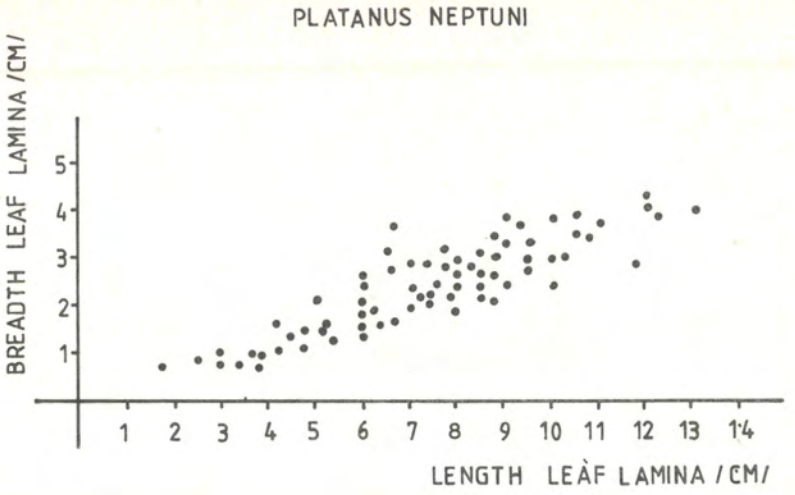


Table 24. Leaf size of "Quercus cruciata"

No.	length	width	L/W	A	No.	length	width	L/W	A
63. 294. 1.	-	1,3			63. 281. 1.	-	1,3		
63. 298. 1.	-	1,4			63. 282. 1.	-	1,6		
63. 300. 1.	-	1,6			63. 288. 1.	-	2,1		
63. 301. 1.	-	2,1			63. 289. 1.	8,3	1,3	6,4	7,2
63. 313. 1.	-	1,3			63. 291. 1.	-	0,9		
63. 304. 1.	-	0,8				-	2,3		
63. 261. 1.	-	2,6			63. 192. 1.	-	3,7		
	-	1,5			63. 189. 1.	-	1,5		
63. 267. 1.	-	1,8			63. 194. 1.	-	3,7		
	-	2,1			63. 202. 1.	-	0,9		
63. 265. 1.	-	2,6			63. 200. 1.	-	3,4		
63. 268. 1.	-	1,6			63. 197. 1.	12,2	5,5	2,2	44,7
	-	1,6			63. 199. 1.	8,5	4,2	2,0	23,8
63. 266. 1.	-	2,4			63. 191. 1.	11,5	-		
63. 271. 1.	-	2,2			63. 190. 1.	-	5,5		
	-	1,8			63. 188. 1.	-	2,5		
	-	1,3			63. 218. 1.	-	2,7		
63. 272. 1.	-	2,2			63. 219. 1.	-	3,0		
63. 273. 1.	7,0	1,2	5,8	5,6	63. 229. 1.	5,5	2,2	2,5	8,1
63. 274. 1.	-	2,1			63. 211. 1.	-	2,1		
	-	2,0			63. 208. 1.	-	2,8		
63. 286. 1.	-	1,6			63. 214. 1.	-	4,2		
63. 284. 1.	-	1,7			63. 196. 1.	-	5,5		
63. 278. 1.	-	2,1			63. 222. 1.	-	3,7		
	-	2,1			63. 217. 2.	-	4,0		
63. 279. 1.	-	1,7			63. 201. 1.	-	3,8		
	-	2,0			63. 264. 1.	6,8	1,7	4,0	7,7
63. 283. 1	-	2,7			63. 346. 1.	-	1,4		
	-	2,7			63. 345. 1.	-	1,2		
63. 280. 1.	-	1,8			63. 343. 1.	-	1,9		

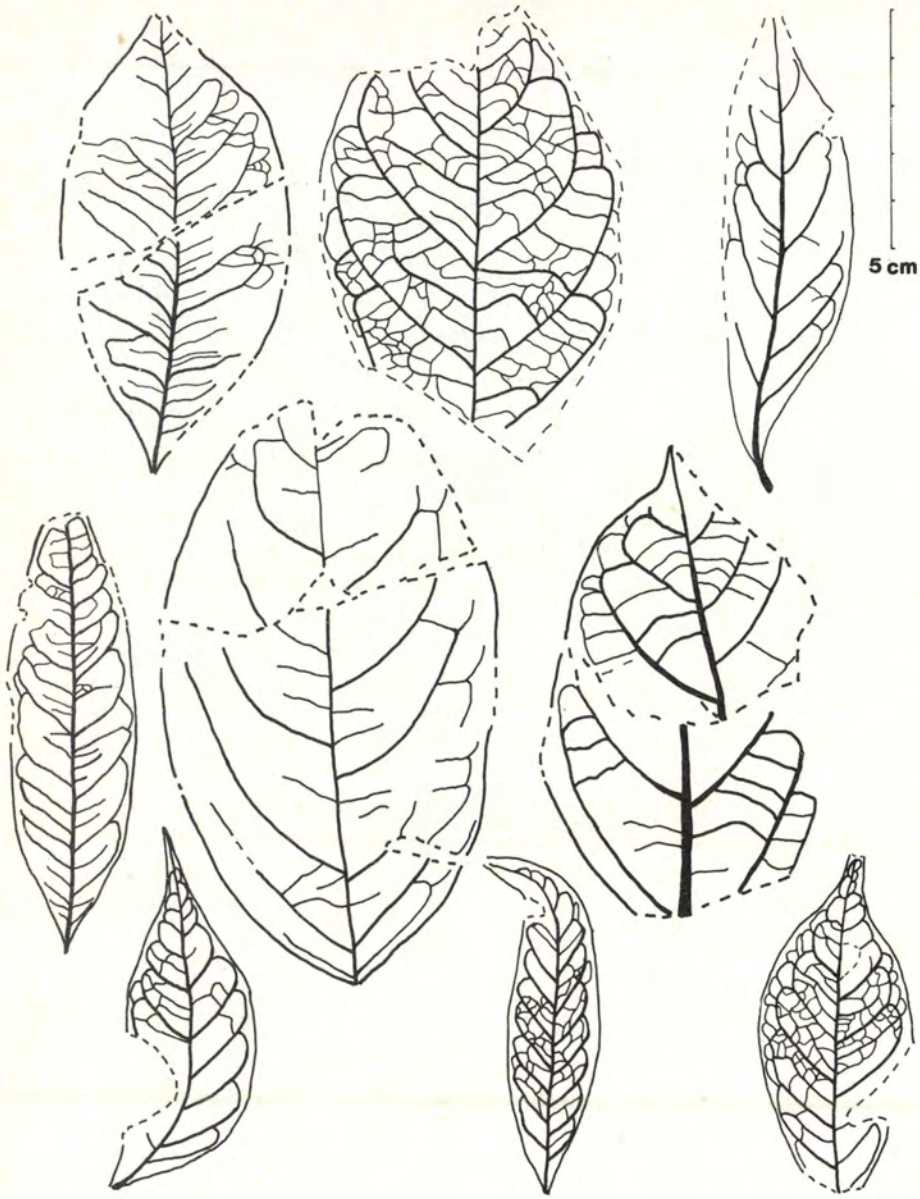


Fig. 2. Leaf types in the Ipolytarnóc flora

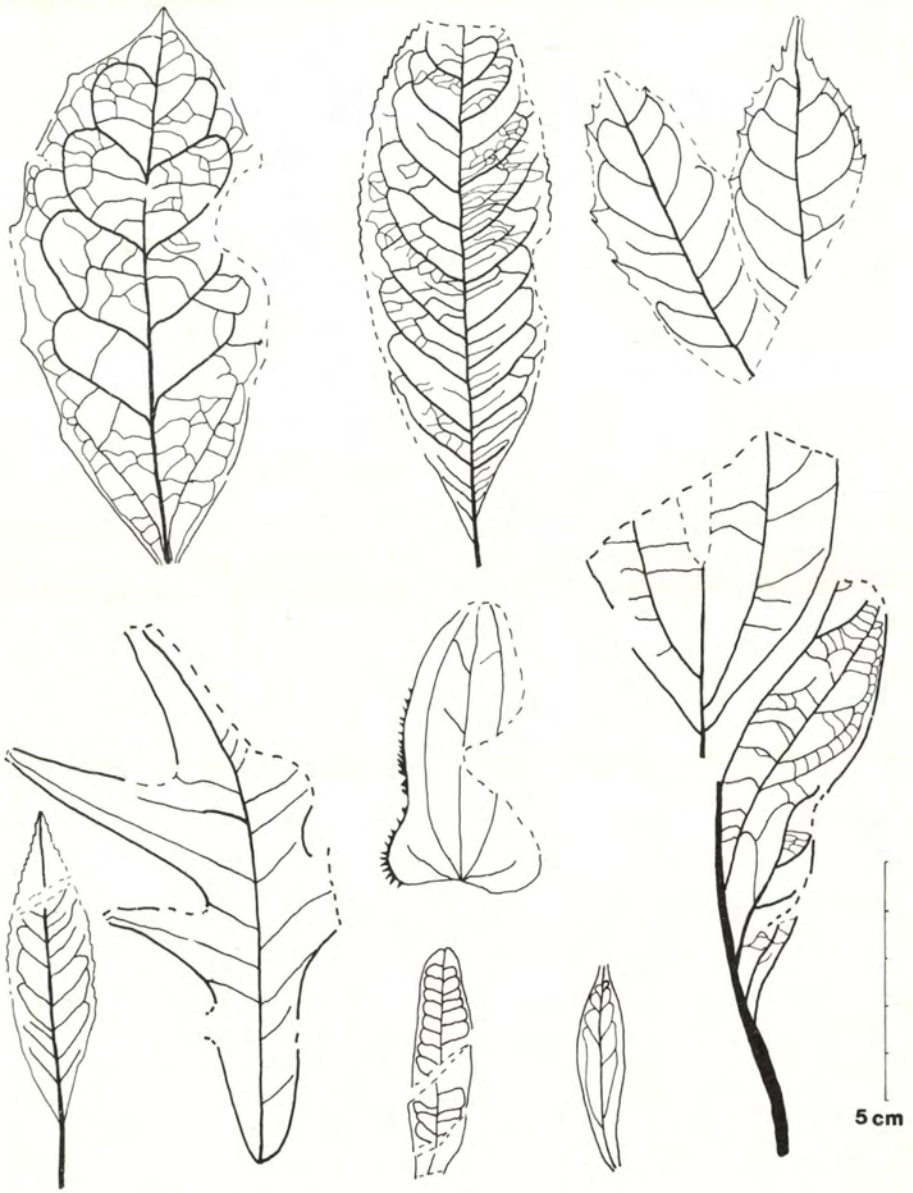


Fig. 3. Leaf types in the Ipolytarnóc flora



Fig. 4. Leaf types in the Ipolytarnóc flora

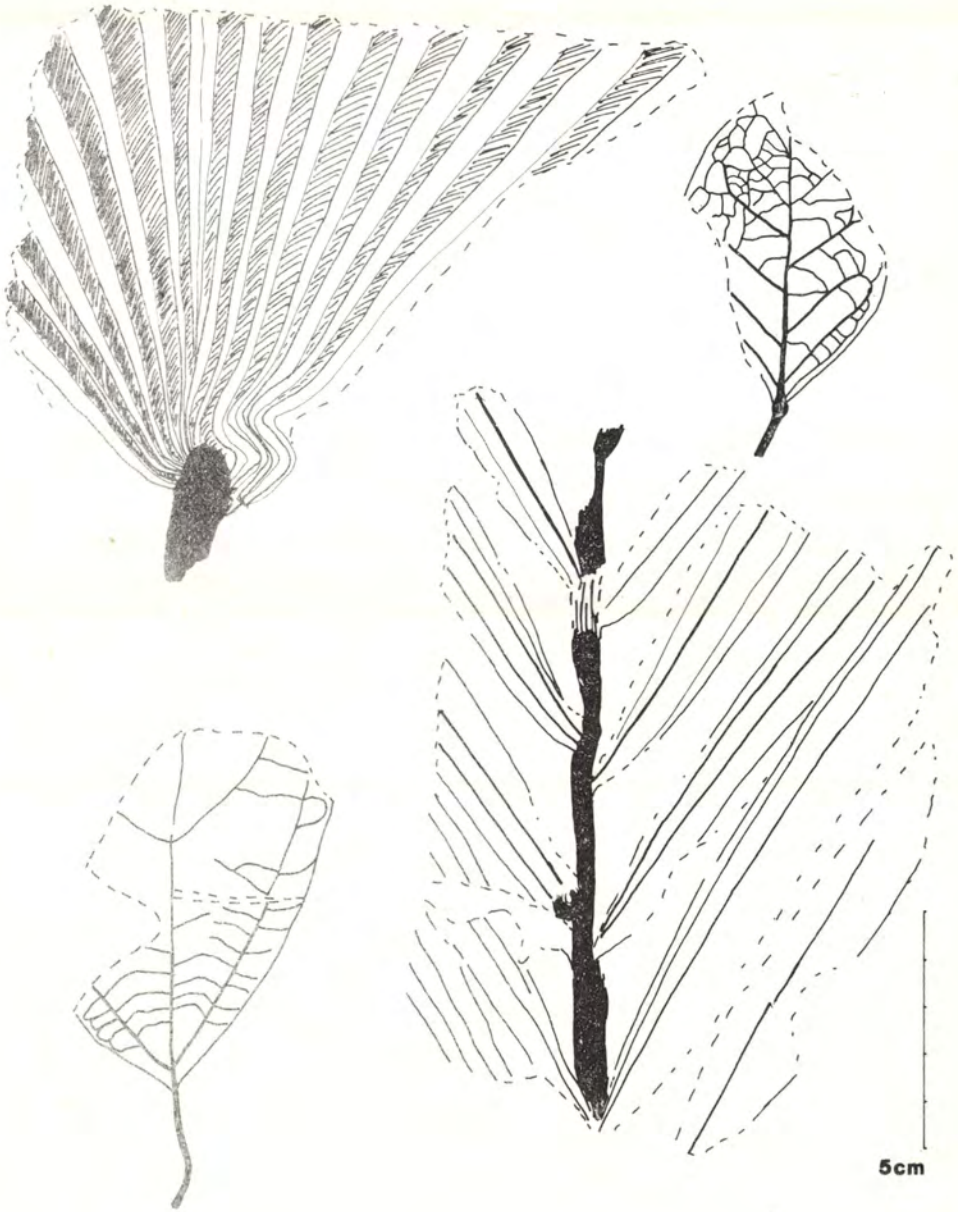


Fig. 5. Leaf types in the Ipolytarnóc flora

Table 24 (continued)

No.	length	width	L/W	A	No.	length	width	L/W	A
63. 344. 1.	-	2.0			63. 341. 1.	-	2.4		
63. 340. 1.	-	2.2			63. 342. 1.	-	2.4		
63. 350. 1.	-	1.9			63. 360. 1.	-	2.5		
	-	1.9			63. 394. 1.	-	2.1		
63. 351. 1.	-	1.8			63. 387. 1.	-	3.0		
63. 352. 1.	-	1.9			63. 386. 1.	-	2.7		

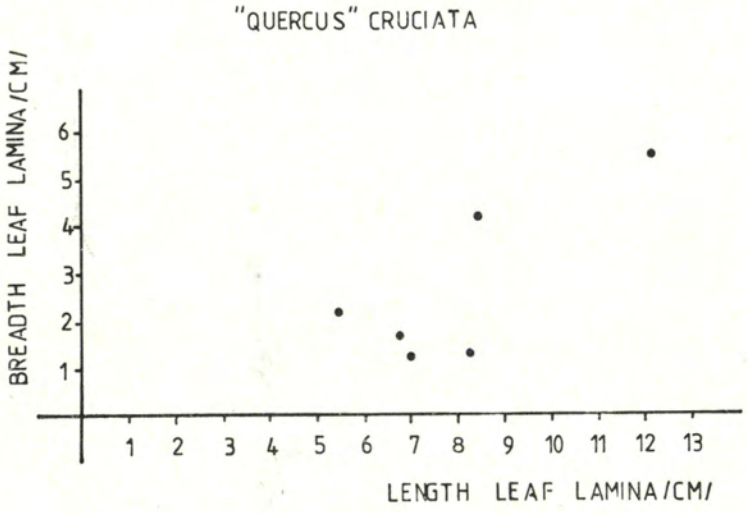


Table 25. Leaf size of Spiraea sp. 1.

No.	length	width	L/W	A	No.	length	width	L/W	A
82. 220. 1.	2.7	1.2	2.25	2.2	82. 229. 1.	2.4	1.3	1.8	2.1
82. 221. 1.	2.9	1.2	2.4	2.3	82. 232. 1.	2.3	1.2	1.9	1.8

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