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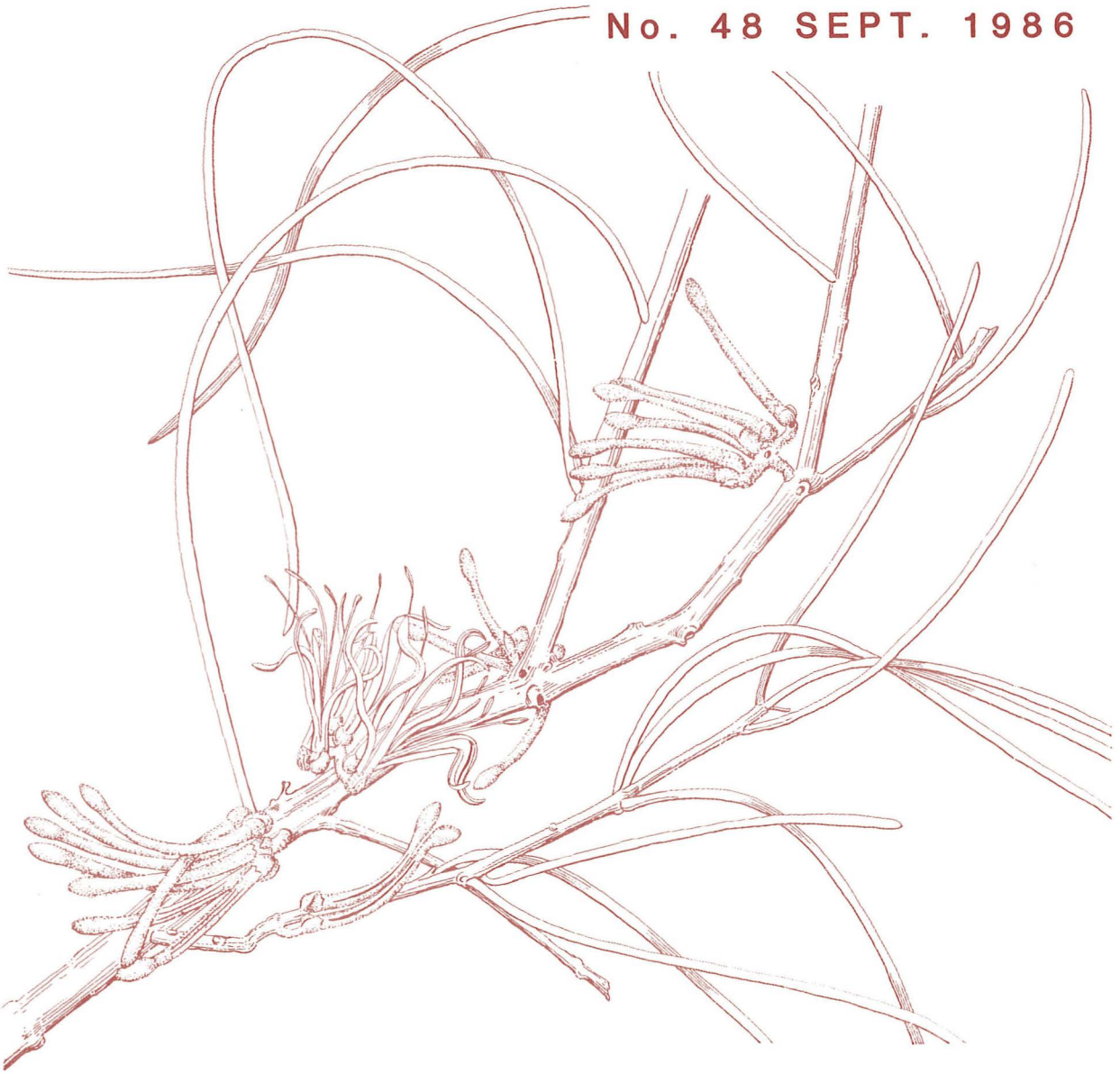

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KARL DOMIN'S VISIT TO MT. BELLENDEN KER (1909-1910)

Arthur D. Chapman
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Karl Domin (1882-1953) visited Australia between 10 December 1909 and about the 6th May 1910 along with a fellow Czechoslovakian friend and colleague, Dr J. Daneš, a noted Geologist. Their stay in Australia was a small, but significant, part of a journey that took them to India, Ceylon, Java (where they stayed for three months), Australia and Ceylon (Sri Lanka). They left Prague together on 25 July 1909 and Domin arrived back toward the end of May 1910. Daneš stayed on in Australia and did not arrive back in Prague until October 1910. Daneš had a strong interest in volcanism and in Limestone formations, and it was he that influenced many of the decisions as to where the pair travelled.

Domin and Daneš arrived in Cairns on 28 December 1909. On the 30th they left for Harvey's Creek where they stayed overnight at the local hotel. The following day, Friday 31st December (not Monday as given by Domin in the following article) they set out to climb Mt. Bellenden Ker.

Domin was a prolific writer and averaged over 50 papers per year for most of his working life (Novák, 1931). While on this journey Domin sent many articles back to Czechoslovakia for publication in local newspapers and in Scientific journals. The attached article, "New Year on the Highest Peak in Tropical Australia", was published in Národní Listy No. 3 of April 1910. The title of this journal translates roughly as "National Pages, three for the year 1910, No. 92 - Sunday Cultural Supplement". This journal was used by many explorers and scientists for publishing their more popular articles and was generally regarded as a high quality magazine.

The article is reproduced in full below.

Acknowledgements

I would like to thank Mr M. Pražák of the C.S.I.R.O. translation service for translating Domin's article into English, and Dr Jiří Soják and Mrs Blanka Deylová-Skočdopolová of the Národní Muzeum v Praha in Průhonice for their kind help in extracting valuable historical information on Karl Domin during my visit to that institution in 1983.

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NEW YEAR ON THE HIGHEST PEAK OF TROPICAL AUSTRALIA

Dr Karl Domin

FROM: Národní Listy 3: 9-10 (1910)

Each country has its own reputation, based partly on its real peculiarities and partly on prejudices which are handed down from generation to generation and are accepted uncritically in all good faith. Some travellers regard it their sacred duty to spread these prejudices and to exhibit their unrestrained fancy. Others observe patiently and quietly and report their observations in a simple manner irrespective of the fact that the impression of terrible dangers, to which they have been exposed and which they could brave by their own energy, will thus be effaced. There is a prejudice about Australia that this country is not interesting in itself and that it has modern, rapidly growing cities without special charms and a nature which may enthuse only a specialist. With this prejudice I left, with my colleague Dr Daneš, beautiful Java, the island of the eternal spring, where above the plain covered with all hues of green, magnificent volcanoes proudly raise their peaks, some of them still active and discharging every day dense clouds high into the sky. At the very outset, we were surprised, though very agreeably. Navigation along the coast of Queensland from the tiny, though important, islet, Thursday Island, to Brisbane and back to Cairns showed us one of the most beautiful coasts, accompanied by hundreds and hundreds of small and larger islets which attracted our attention due to the constant alternation of the scenery. And far away we saw the famous coral reef, stretching like a long yellowish strip and forming the natural protection of the entire coast of north-eastern Australia. The sea only seldom becomes rough here in consequence of the violent storms raging further away in the open ocean. We made our first excursion in tropical northern Queensland. The largest stretch with real tropical climate extends from Cooktown to Ingham and attains its greatest width (about 50km away from the coast) precisely in the environs of Cairns where the gigantic Bellenden Ker mountain range rises. It holds back most of the rain clouds. In some places, the precipitation amounts to 5000mm. Rains are here most frequent in summer, i.e. from December to April. We thought that at the end of December and at the beginning of January would still have tolerable weather. However, we were completely disappointed in this respect. There is a connection between Cairns and Harvey Creek from where it is possible to best climb the highest peak of Bellenden Ker. All this region is covered with deep virgin rainforests which are so beautiful and magnificent in detail as well as in the general scenery that they perhaps surpass even the virgin mountain forests of Java.

In some places there are clearings where the cultivated sugar-cane is spreading and will soon take over the whole area. But the rainforests themselves tower very high like dark, agitated battlements and it is very difficult to penetrate them. Huge lianas hang like heavy drapes from tree to tree, every nook is filled with vegetation and everything is hopelessly entangled in frightful rattans whose relatively thin stems attain more than 100m in length and whose thorny whips retain everything with their thorns turned backwards and do not release easily. Australians call them jokingly "the lawyer vine". But other small dangers also lurk in the virgin forest. Thousands of mosquitoes live here, and especially during high humidity, one finds small black leeches, causing bloody wounds which heal with difficulty making the stay in some parts intolerable. In addition, the plant kingdom has here one dangerous representative, the shrubby and arborescent

nettle trees from the genus Laportea, which spread horizontally to all sides their broad leaves, covered with stinging hairs. Woe to a man who is stung! The consequences last for many weeks and the pain is experienced on contact with water for months. These nettle trees are even more harmful to horses which run amuck after being stung and kick themselves to death within a short time. Fortunately, these nettle trees grow in large numbers only in the freer parts of the rainforest and can be easily recognised. I have never found them in the deep rainforest where the eternal twilight predominates and where the direct sunlight does not penetrate all year around. All these troubles (and many others) are counter-balanced a hundred times by the splendour of the continually altering scenery which even the unrestrained imagination of a European cannot contrive.

On December 30 we arrived in Harvey's Creek, consisting of the so-called hotel, where we found accommodation and made immediate preparations for the ascent of Bellenden Ker. This highest mountain of tropical Australia is overgrown up to the peak with the virgin rainforest, has its own interesting myth and many prejudices, describing the ascent of the peak (about 1600m in height) as extremely difficult and full of dangers. Anyway, only a few persons have hitherto reached the top and nobody in the rainy season. We knew that the ascent at this time would be much more difficult, but our arrangements did not permit any other period owing to the lack of time. Besides, I wished to know the flora of this mountain range precisely at this time. Our first worry was to get a sufficient number of aborigines who would cut our way through the thicket and would carry the scientific instruments, etc. For this purpose we requested a constable from the Police Station at Cairns to help us and to facilitate our preparations. It was not possible to take with us the aborigines from Cairns. Each district keeps exactly to its boundaries (being, for the most part, very narrow) and the aborigines of Cairns would not risk at any price being attacked by the aborigines of Harvey's Creek. We soon reached an agreement with the oldest native visiting regularly the hotel. He said that the whole camp, and not only the number requested by us, would go with us (from about 8 to 10 members). We insisted that they spend the night in the neighbourhood. But this was impossible and we thus had to be satisfied with the promise that all of them would come "early in the morning". I did not like this whole affair and late at night after the consultation with my colleague Danes we contacted the Police Inspector at Cairns after many difficulties (it was on Sunday) and asked him to allow constable Mackay, attached to us, to accompany us during the ascent. On the following day, early in the morning, we were ready, but the natives did not come. Finally, the old Charlie presented himself with a very young aborigine and said that the others would join us after 20 minutes about one and a half kilometers away. So we had to pick up all the things and bending under the weight of the unusual burden, we sweated profusely and counted the minutes, expecting our other guides. However, the real state of affairs soon became obvious. The other natives from the first camp refused to go, and when we approached them they all fled to the rainforest, with the exception of three (one of whom also ran away). We were at a loss what to do. We started to chase them and to talk to them and finally, three hours later, we gathered altogether six natives and gave a sigh of relief that we could at last set off on our journey. We walked on a made forest track for about a quarter of an hour. Then, however, we penetrated further into the deep rainforest. The hatchets, cutting through the thicket, whizzed. They cut only a rough path through the thick rattans with which the forest was completely intertwined. Our long procession went on only slowly. After a few hours, we reached the first larger stream at about 150 to 200m above sea level, where we made a lunch

stop and ate something. I took this opportunity to explore the environs, collecting diligently and writing the botanical-geographical notes. I noticed that the massive Australian jungle boots (much larger than the Alpine boots) were, to be sure, well-suited for a walk through the rainforest and the swamps, but perilous during the climbing of the gigantic granite boulders in the river-bed. Regrettably, this knowledge was acquired by an unwanted bath in the crystal water of a pool.

The terrain sharply rises further uphill. The rainforest becomes poor in undergrowth, but the arboreous lianas become most luxuriant. Their large twisted stems hang down in queer arches and masses between individual trees, frequently of vast dimensions. As a rule, the crowns are not even visible and the botanist has a very difficult task of determining them from the bark, the fallen leaves and fruits. Rattans predominate up to about 500m. They are no longer as frequent further uphill, instead tree ferns become more numerous. They open the splendid fans of their large fronds above the unnaturally thin, smooth stems, about 10m in height. The brushwood contains a larger number of small palm-trees which are not even well-known to the botanist. At about 850 to 950m above sea level, the terrain is extremely rocky, overgrown with small and large ferns, covered with pads of mosses and a great variety of lush phanerogamic vegetation. The Meston's mangosteen is particularly frequent at this altitude. This is a nice tree with a tall, slender stem and small leaves, having pendulous tips, and yellow-green fruits of pleasantly acid flavour. It was discovered here 20 years ago. This is its only site.

We reached about 1050m above sea level, where we still found (last) water and where the terrain permitted camping. We were all very busy. We made fires and felled several trees and shrubs so as to build the tents. The aborigines soon prepared a pleasant shelter for themselves from palm leaves. Using thin stems, we constructed a framework on which we simply stretched a very thin canvas. We enjoyed very much a simple dinner in the middle of the forest. Unfortunately, clouds appeared, at first only those of a type of mountain fog and then those forming a drizzling rain. We hoped that these fogs would not result in a violent tropical storm. My friend Danes rewrote his notes by candlelight and I stored the collected plants, while it gradually darkened and the shadows in the forest lengthened. The round half-open tent of the aborigines showed its sharp outlines. The aborigines sat is a circle around the blazing fire, resting after their unusual strenuous work, baking pancakes made of flour mixed with water and frying large eggs of wild turkey-hens they had picked up on the way from large heaps of foliage in which these birds hide their eggs. We saw a large number of them on the way but none of them came within the range of shot. A black turkey, shot at the very outset of our expedition, was the only prey. I think that the aborigines enjoyed it better than we, it being like a slightly tough beef.

The night soon came stealthily into the maze of trees and shrubs. We could see the moist fog and the dark outlines of vegetation only near the fires.

A small beetle, flying like a small stray light, going out and again gleaming, shined here and there in the darkness. The usual night concert did not disturb too much the harmony of the general mood. Only from time to time, the noisy shriek of white parrots, uttered in a shrill and disturbing manner, was heard amidst the sounds. Parrots like these are not as frequent at this altitude as down on the plain. I recalled instinctively

Kipling's description of evenings in the virgin forests. All the nature abounded with a mixture of sounds which produced together the great silence of the forest.

The rain shower became heavier. We took shelter under the tent and entertained ourselves by guessing when water would seep through our shelter. We lay fairly comfortably on large leaves of palm-trees and ferns, strewn on the ground. A bundle of plants and the botanical knapsack served just as well under the head as the filled bag of my friend.

In the meantime, it was completely dark outside. Stumbling over the boulders and grasping the branches with lianas, I attempted to penetrate into the darkness. Here and there, tiny beetles, flying around in the quiet night like some stray little lights, illuminated marvelously the way. All of a sudden, a strange and stronger light surprised me from afar. I recognised at first glance that this light was of a different origin and shined motionless in the same spot. I crept slightly higher on the bent stem of the nearest tree which I found in the darkness so as to ascertain more accurately the site of the "enigmatic will-o'-the-wisp". I then attempted to penetrate in it's direction, but lost my way in the maze of roots and lianas and was finally glad when I returned to the fires of our camp. However, I did not stay there long; this strange light allured me and I started to look for it again. Finally, I stopped near a row of tiny white fungi, like small champignons, emitting an intensive phosphorescent light. In their vicinity it was possible even to read.

At the same time, my friend Danes̆ slept a deep, good sleep and I lay down between him and our guide who had taken over a large part of our worries. But we could not fall asleep for a long time. The rain became denser and within a short time small drops of rainwater fell directly on us. But we could not help it on that night and thus involuntarily took a shower-bath. It was 12 o'clock sharp at midnight when I wished my neighbour on the right a Happy New Year. We wanted to wake up my friend Danes̆ who owned enviably a bottle of whisky which would have served excellently the New Year's celebration in the drenched tent, but we deemed it sinful to rouse him from a good sleep. So we amused outselves alone for about two hours and I dried my mohair overcoat above the fire and contemplated how much better was the thick jacket made of camel's hair which protected my friend.

However, the night was not so unpleasant as could be expected. The temperature dropped, on the whole, insignificantly and in the morning we got up fairly fresh and ready for the ascent of the peak. The road was steep, rocky and the character of the forest was changing. We saw only individual large trunks, the majority being of thin trees with tall stems and shrubs, some palm-trees and particularly the tree ferns, forming entire proud groups in some places. Individual stems of the dammar pine rose to the sky like some huge majestic columns, secreting a large amount of pleasantly smelling resin which formed thick layers at the bottom. The path itself was more impassable, but we still went on faster, since the clearing of the path through the thicket was not as difficult and there were only individual rattans. The higher we ascended, the lower the forest became. Finally, we reached the periphery of an extremely dense thicket with individual trees, where the path made by our forerunners was still visible. We reached the peak in sunlight alternating with showers. But we had a view only of a huge sea of white clouds surging around. After a short period of rest we took our hatchets and tomahawks and attempted to clear a path on the crest, which was only a few meters in width falling off steeply on

both sides. This work almost exceeded human capability, for the trees and shrubs covering very densely the peak had wood hard like iron. After a prolonged exertion we had hardly penetrated 100m. As had been agreed, two natives came to help us, but they were reluctant to clear the path and we compelled them almost by force to go in front of us. Our work, however, was without result. There was no view anywhere. I collected the interesting shrubs and trees. Among them a myrtaceous tree was particularly conspicuous. It has a strange, strong and twisted stem, rising slantingly up to 10m above the other shrubby undergrowth, branching out furcately, then straightening and forming by its small coriaceous leaves such a dense dark green crown looking like a single compact green mass in one level. We stayed on the top for several hours. A view presented itself to us only for a little while. My friend Danes provided for the cutting of some trees in case the weather cleared. On the whole mountain range there was no single free little spot, only beneath the peak a space, a few paces in width. On the other side (to the west), however, the narrow top crest was not free and, therefore, we cleared a place.

In the evening we returned to our camp. Foreseeing (and quite correctly) that the following night would be worse, we let the natives construct the same half-open tent from palm leaves which they had made for themselves the night before and which protected us much better against the rain which sometimes became a tropical downpour. We dried our wet things late into the night and many of them were destroyed. Some water, of course, penetrated into the tent from the sides, but the night was, on the whole, tolerable. Early in the morning while it rained, we prepared ourselves for the descent. We came back in a dreadful state and our suits were completely ruined. On the last day, we suffered a great deal from leeches which attached themselves remarkably rapidly to the face and the head. The neck of my friend and my legs were their most preferred site of attachment, with the difference that it was possible to remove them from the neck, but they adhered to the legs and sucked blood so much that their volume greatly increased.

It is interesting that up to now nobody has mentioned a word about the general character of the mountain range. From the botanical point of view I had, to be sure, the opportunity to carry out here the first botanical-geographical observations and to collect a few nice new specimens, but on the whole, I was disappointed. The whole mountain range is granitic and has a poor, sandy soil. All high nutrient particles from the decomposing rock are carried down by the swift water, so that the vegetation has not as good an opportunity to develop as prolifically as on the neighbouring basaltic mountain ranges or down on the alluvium. We saw how fast small streams could increase. Three or four hours after the violent rushes of water, the streams overflow and form frightful, wild currents which can only be crossed with the risk of life. Therefore, we hurried on the way back, so that we would reach the last stream before it became a rapid current.

In the whole district it is very difficult to deal with the natives. They are incredibly lazy, slow and especially unreliable. They are really a very low race which has adopted from civilisation little more than a few rags. We remembered gratefully the Javanese natives, so agile and hardened. We had to care for the aborigines ourselves and were afraid that they might run away. It was certainly not useless to have with us our revolvers, as it increased their respect for us. However, no direct danger was imminent here. But it was fairly awkward when two natives who were

supposed to bring us water to the peak simply did not appear. Only here we learnt to appreciate fully the importance of water, much more valuable than food. We were afraid that all the aborigines (with the exception of two who were with us) would run away, and we sent old reliable Charlie down. Fortunately, our fears did not come true. For all that, one native did run away without saying good bye. It is interesting that the aborigines have their superstitions and from what I have heard from Australians and from them I am convinced that they even have their own religion, something reminiscent of the transmigration of souls. We noticed ourselves that they had their superstitions. The old Charlie, who was first to clear the path, suddenly turned away from the direct path in front of a large fern. We asked him why he did it. He said that it was the incarnated Satan. We allowed him, of course, to go where he wanted, but we ourselves cut the "incarnated devil" mercilessly down.

I shall say a few words about the ascents of the highest peak of Bellenden Ker. According to the available information, A. Meston was the first to ascend it with the costly expedition sent by the Government of Queensland in June 1889. Meston himself published a detailed report about this expedition, which sounds a little too adventurous. A danger lurked on each step. When we read this report we shiver all over. Many are of the opinion that Meston never reached the peak. I do not hold this view, but regard his statement that he crossed the whole crest from the southern peak across the highest middle peak to the northern top as a creation of his unrestrained fantasy. This is almost impossible. If Meston had really cleared his path here some traces of this expedition would remain. Also the vegetation he writes about is more likely to have grown in his head than on the crest of Bellenden Ker.

Moreover, two men claimed to have reached the peak before Meston. Meston defended his priority very resolutely (and with right), but overestimated his achievement and exaggerated too much.

Subinspector Johnston presumably ascended the peak in 1873. It is, however, certain that he only reached Mount Toress peak and not Bellenden Ker. Permanent clouds of the rainy season, perhaps, were to be blamed for this mistake. It could be assumed with certainty that the barometer of Mr Johnston was fairly peculiar, since according to it, he reached about 200m above the highest peak of the whole mountain range. Meston added his acrid remark that he probably completed his ascent in a balloon.

The second climber was W.A. Sayer who in 1886 was sent by Baron von Müller to collect plants in this area. The report of Mr Sayer sounds still more bizarre than all the products of the Meston's mind. During the third attempt at the ascent near Harvey's Creek, Mr Sayer forded up to the waist through a flooded river for eight miles, fell from the highest rocks like the most clever acrobat and was without food for four and a half days. At 1000m above sea level (where no natives dwelt!), he was nearly murdered by wild aborigines. His whole report was written in this manner. At the fourth attempt, he finally succeeded in reaching the top, where he spent eight and a half days and carved his name and the date into a tall tree, called Elaeocarp (such a tree does not grow in mountains at all!).

Meston ascended the top once more and published such lies that even the Australians protested against such cheating. It is certain that the ascent is fairly difficult, but in the last decade a few people

accomplished it without any accidents. Nobody reached the peak in the last few years and therefore no sign of any trail was there.

The Bellenden Ker mountain range is also interesting from the viewpoint of the Earth's evolution, since it demonstrates the former connection of Australia with New Guinea. It is obvious that the entire tropical flora of Australia is of the Malayan-Papuan origin, but the majority of the types has been considerably transformed here. However, these questions are interesting mainly to the specialists. It is certain that the fauna will furnish interesting proofs of the general evolution. But not much is known about it. The climbing marsupial, called here the tree-climbing kangaroo was very interesting to us. At about 1000m above sea level, we suddenly heard branches cracking high on the tops of trees and within a short time the originator of this noise, looking like a small monkey, appeared.

It is interesting that the consciousness of one's own dignity can enhance the energy of the body. On our way back home, our old Charlie looked really very badly. His ugly black face with the flattened, pressed nose, the blinking eyes and the almost toothless mouth with the pale lolling tongue appeared to be more wrinkled than ever. In the evening when we walked home through the deep forest after the refreshing bath in the mountain creek we heard by chance that the great corroboree, the celebration of aborigines imitating the cruel warfare, took place. Since no danger was imminent (we already had our "acquaintances"), we took this opportunity to see it. And look! The old Charlie as if rejuvenated, skipped around at the front, shouting fiercefully and showing the large colourfully painted shield, not proportional to his comically small stature, and a wooden sword of a really great weight and size. Otherwise, the corroboree was not bloody. One broken arm here and there, that was all.

Night fell again onto the open space of the corroboree, surrounded with the dark contours of the forest. From far away we could still hear the wild shouting, impacts of shields and the beating of wooden swords.

Dr Karel Domin

TAXONOMIC CHANGES IN AUSTRALIAN MIMOSACEAE

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[When Andrew Kanis knew he was not well enough to attend the Symposium on Ecology of Australia's Wet Tropics in Brisbane in August 1986, he accepted Bryan Barlow's offer to read it for him. Neither expected that it would be read posthumously. Andrew had a strong interest in Mimosaceae over many years (see obituary in this issue), and had a viewpoint which is worth recording. The following is reproduced, with minor editorial changes, from the "extended abstract" of his paper, which Andrew had prepared before he was aware of his illness. Unfortunately a list of references was not added to the text, but they can probably be easily located if needed - Ed.]

The Mimosaceae, more often classified as a subfamily of Leguminosae in traditional systems, have shown remarkable and long-lasting stability at generic, and even more at suprageneric level, since the monumental revision by Bentham (1875). Although the number of included species has more than doubled since that time, when about 1200 were known, Bentham's 40 "genera or subgenera" hardly increased in most relevant publications during the next hundred years or so. The same can be said for Bentham's 6 tribes, which have generally survived, even in such relatively recent works as the second volume of Engler's Syllabus in the 1964 edition, and Hutchinson's first volume of the Genera of Flowering Plants of the same year. These treatments show great similarities, and differ from Bentham's mainly by (1) inclusion of tribe Piptadenieae in tribe Adenantherae, (2) the transfer of Neptunia from tribe Mimoseae to tribe Adenantherae, following Taubert in the first edition of the Pflanzenfamilien, and (3) the recognition of the new monotypic South American tribe Mimozygantheae established by Burkart (1939).

These changes do not represent a major overhaul of Bentham's opinions, but one should not regard this as unmistakable proof that his system was entirely to everyone's liking. A more probable explanation is that no subsequent author would have had a sufficient insight into this family as a whole to present a more satisfactory overview. Several taxonomists have in fact proposed small, usually segregate genera over the years, but on the whole these have not enjoyed general acceptance. However in a rather controversial treatment in the North American Flora, Britton and Rose (1928) took up a number of these genera, and added several more, presenting a total of 55 for the North American region.

Britton and Rose's narrower concepts were adopted for our part of the world by Kostermans (1954), who revised the species previously placed in Pithecellobium in the Indo-Pacific region, and attributed these to 10 mostly regional genera while reserving the name Pithecellobium for species of the Americas. The 6 native Australian species treated by him were allocated to Cathormion (1 sp.) and Abarema (5 spp.). A number of authors in New South Wales (Anderson 1968; Beadle 1976; Floyd 1975, 1979) accepted the transfer to Abarema; on the other hand Chippendale (1970) and Stanley and Ross (1983) have continued to use Pithecellobium.

However the work by Kostermans on part of tribe Ingeae did complement the revision of Archidendron in the traditional sense by De Wit (1952), who

recognized 2 spp. for Australia, one of these being endemic. Kostermans (1956) added another endemic Australian species to this genus, one that he had earlier treated as a Zygia, albeit with some doubt. Then Mohlenbrock (1966) published a new revision of what he called Pithecellobium sect. Archidendron, to which he added a fourth Australian species. His wider concept of Pithecellobium was not accepted by curators and authors, however, and his subdivision of the tribe, based almost exclusively on fruit characters, was generally criticized as rather artificial. In connection with tribe Ingeae, the study of Fosberg (1965) on the species of Albizia sect. Lophantha (sect. "Pachysperma" of Fosberg), represented in Australia by its type species, should also be noted.

With respect to genera in other tribes, Windler's (1966) revision of Neptunia is relevant. He recognized 11 spp. worldwide, 5 of these almost exclusively Australian and grouped in a new sect. Pentandra. The genera Dichrostachys and Entada, which are largely extra-Australian, were treated by Brennan in revisions undertaken for African floras in the 1950s and 1960s. In addition, Verdcourt's (1979) largely traditional treatment in his Manual of New Guinea Legumes will inevitably have some bearing on future treatments of Australian taxa, particularly at species level.

A fresh look at the break-down of the family was attempted by a number of collaborators during the International Legume Conference held at Kew in 1978. The relevant proceedings were published as Advances in Legume Systematics in 1981. Lewis and Elias (1981) presented a treatment of an enlarged tribe Mimoseae, including tribe Adenantherae s.l., but subdivided into 12 informal groups. They did not introduce changes affecting Australian taxa, but they accepted some post-Benthamian genera, mostly of Harms, Burkart and Brennan. One could say that theirs is a considered middle course between the lumpers and the splitters. Australian genera arranged according to this treatment are listed in Table 1.

Tribe Acacieae was discussed at the Conference by Vassal, who accepted a single monotypic African genus Faidherbia next to an otherwise all-encompassing genus Acacia, while advancing his own subdivision of the latter into 3 subgenera. Bentham had found it difficult to decide on a grouping of the species concerned: after proposing 6 series in his first revision (1841), he presented 11 in Flora Australiensis (1864), reducing these again to 6 in Genera Plantarum the following year and in his final monographic revision (1875). He also proposed various subseries and even lower subdivisions above species level. Subsequent authors made more variations on this pattern, be it with a tendency to raise the level of the respective infra-generic taxa. Recently it was proposed by Pedley (1986) to promote Vassal's subgenera to genera in their own right. Amongst other things this will mean a transfer of more than 90% of the Australian species to Racosperma Mart., a bold step indeed. However some insiders fear that this may not be the last word yet at generic level. Furthermore, specialists now tend to agree that tribe Acacieae will be shown to be a grade rather than a clade, which would make this tribe untenable in the eyes of the more puristically inclined.

Nielsen, who discussed tribe Ingeae at the Kew Conference, proposed some rigorous changes in generic concepts. He has studied this tribe in particular for his revisionary work on the family for continental southeast Asia, the Malesian region and the southwest Pacific. In collaboration with

TABLE 1

Genera of Leguminosae-Mimosoideae arranged according to Elias (1981)

TRIBE & GENUS	AUSTRALIA	EXTRA-AUSTRALIA
I Parkieae (Wight & Arnott) Benth. 1842		2 genera
II Mimozygantheae Burkart 1939		monotypic, S America
III Mimoseae Bronn 1822 (incl. Adenantherae Benth. & Piptadenieae Benth.)		
1 Adenanthera L. 1753	2 spp.	Indo-Pacific; 8 spp.
2 Entada Adans. 1763	2 spp.	Pantropic; 30 spp.
3 *Prosopis L. 1767	1-2 nat. spp.	Amer., Afr., SW Asia; 44 spp.
4 *Mimosa L. 1753	2-3 nat. spp.	mostly Amer.; 450 spp.
5 *Leucaena Benth. 1842	1 nat. sp.	American; 40 spp.
6 Dichrostachys Wight & Arnott 1834	2 spp.	Palaeotrop.; 12 spp.
7 *Desmanthus Willd. 1806	1-2 nat. spp.	American; 25 spp.
8 Neptunia Lour. 1790	5 spp.	Pantropic; 12 spp.
IV Acacieae Benth. 1865		
9 Acacia Miller 1754 subgen. Acacia subgen. Aculeiferum Vassal subgen. Heterophyllum Vassal	850 spp.?	Pantropic; 1500 spp.?
V Ingeae Benth. 1865		
10 Albizia Durazz. 1772 (incl. Samanea Merr. 1916)	5-6 spp.	Pantropic; 150 spp.
11 *Enterolobium Mart. 1837	1 nat. sp.	American; 5 spp.
12 *Calliandra Benth. 1840	cult. only?	Amer., Madag., India; 200 spp.
13 *Pithecellobium Mart. 1837	cult. only?	Amer.; 20 spp. (s.str.)
14 Paraserianthes Nielsen 1983	2 spp.	Males., Austr..; 4 spp.
15 Archidendropsis Nielsen 1983	3 spp.	SW Pacific, 14 spp.
16 Pararchidendron Nielsen 1983	1 sp.	Males., Austral.; 1 sp.
17 Archidendron F.Muell. 1865 (incl. Abarema and Pithecellobium Auctt. Austral.)	9 spp.	Indo-Pacific; 110 spp.
18 Cathormion Hassk. 1855	1 sp.	Indo-Aust.; 1 sp. (s.str.)

the palynologist Guinet and the wood anatomist Baretta-Kuipers, he has attempted to design a new subdivision of the tribe, based at least in part on new criteria. This has resulted in the reduction of many of the segregate genera of post-Benthamian authors. For example, he does not uphold any of Kostermans' new genera. On the other hand, he has also created 4 of his own genera, 3 being approximately congruent with particular infrageneric taxa in Bentham's system. His conclusions in this world wide review were still somewhat tentative; some American genera in the "Albizia group" were only upheld with doubt, whereas some sections included in Albizia were singled out as potential genera.

In the last few years, Nielsen's views appear to have firmed, at least concerning our part of the world. The following changes are directly relevant to Australia (see Table 2): Abarema and Pithecellobium s.str. are exclusively American, although some representatives of the latter genus have been widely introduced. Four of our species formerly referred to one or other of these genera, as well as 2 new endemic ones, are placed in the Indo-Pacific genus Archidendron. Together with the 3 species accepted already in the latter genus by Kostermans, this gives a total of 9 species for Australia, 7 of them being endemic. Mohlenbrock's Pithecellobium pentzkeanum is sunk in synonymy under Archidendron ramiflorum. An exception is formed by the relatively common and widespread rainforest species, described by Bentham as Pithecellobium pruinosum, which is now placed in the new monotypic genus Pararchidendron. Some American genera, such as Calliandra and Enterolobium, in which a few species are cultivated here, have been maintained by Nielsen, although with some doubt in the latter case. On the other hand the genus Samanea, known here because of S. saman, the introduced "rain-tree", has been relegated to Albizia, as have several other extra-Australian segregate genera. In Nielsen's opinion Albizia is a pantropical genus of c. 150 spp., but is represented in Australia only by 3 native and 2 introduced species. Other native species traditionally placed here have been transferred to new genera: Paraserianthes (2 spp.), also occurring in New Guinea, and an endemic subgenus of Archidendropsis (3 spp.), otherwise mostly a New Caledonian genus. In the proceedings from the Kew Conference, Nielsen indicated that he regarded Cathormion as wholly synonymous with Albizia, but from a recent precursor to his treatment for Flora Malesiana it would appear that he now again regards the Indo-Pacific species C. umbellatum as worthy of generic rank.

Nielsen's taxonomy is bound to have a considerable impact on the botanical literature, at least for our part of the world. He has already published treatments of the Mimosaceae for the floras of Thailand, of Cambodia Laos and Vietnam, and of New Caledonia, and he is apparently well advanced with a chapter for Flora Malesiana. His attempt to tackle a critical group like the Ingeae on a wider front than any of his predecessors is very laudable, but the resulting subdivision is not quite so original as may appear at first sight. Many of Bentham's supra-specific taxa are still there, if often under other names. On balance his reshuffle probably represents an improvement over previous systems, but his allocations of rank could be better argued in order to make some of them appear less arbitrary. It is probably inevitable that Nielsen's generic concepts will be adopted in the treatment for the Flora of Australia, but as far as his concepts of Australian species are concerned, there is little ground for controversy.

TABLE 2

Species of tribe Ingeae (Leguminosae-Mimosaceae) native in Australia, arranged largely according to the publications of I. Nielsen

GENUS & SPECIES	FURTHER DISTRIBUTION
I Albizia Durazz.	
1 A. canescens Benth. (Incl. A. plurijuga Domin?)	
2 A. lebbeck (L.) Benth. [Introduced?]	Palaeotropic
3 A. procera (Roxb.) Benth.	Trop.Asia, Malesia
4 A. retusa Benth.	E Asia, Malesia
II Cathormion Hassk.	
5 C. umbellatum (Vahl) Kosterm. [subsp. miniliforme]	Trop.Asia, Malesia (2 subspp.)
III Paraserianthes Nielsen	
Sect. Paraserianthes	
6 P. lophantha (Willd.) Nielsen [subsp. lophantha]	S Malesia (1 subsp., 2 vars.)
Sect. Falcataria Nielsen	New Guinea (2 spp.)
7 P. toona (Bailey) Nielsen	
IV Archidendropsis Nielsen	
Subgen. Archidendropsis	New Caled (8 spp.), New Guinea (3 spp.)
Subgen. Basaltica Nielsen	
8 A. basaltica (F.Muell.) Nielsen	
9 A. thozetiana (F.Muell.) Nielsen	
10 A. xanthoxylon (C.White & Francis) Nielsen	
V Pararchidendron Nielsen	
11 P. pruinosum (Benth.) Nielsen [var. pruinosum]	S Malesia, New Guinea (3 vars.)
VI Archidendron F.Muell. [Including Abarema & Pithecellobium Auctt. Austral.]	
Ser. Archidendron	Papuasia, Moluccas
12 A. grandiflorum (Benth.) Nielsen [Incl. P. tozeri F.Muell.]	New Guinea
13 A. hendersonii (F.Muell.) Nielsen	
14 A. hirsutum Nielsen	
15 A. lovelliae (Bailey) Nielsen	
16 A. lucyi F.Muell.	Papuasia
17 A. vaillantii (F.Muell.) F.Muell.	
Ser. Stipulatae (Mohl.) Nielsen	New Guinea
18 A. ramiflorum (F.Muell.) Kosterm. [Incl. P. pentzkeanum Mohl.]	
Ser. Morolobiae (Kosterm.) Nielsen	Moluccas (disjunct)
19 A. muellerianum (Maiden & R.Baker) Nielsen	
20 A. whitei Nielsen	

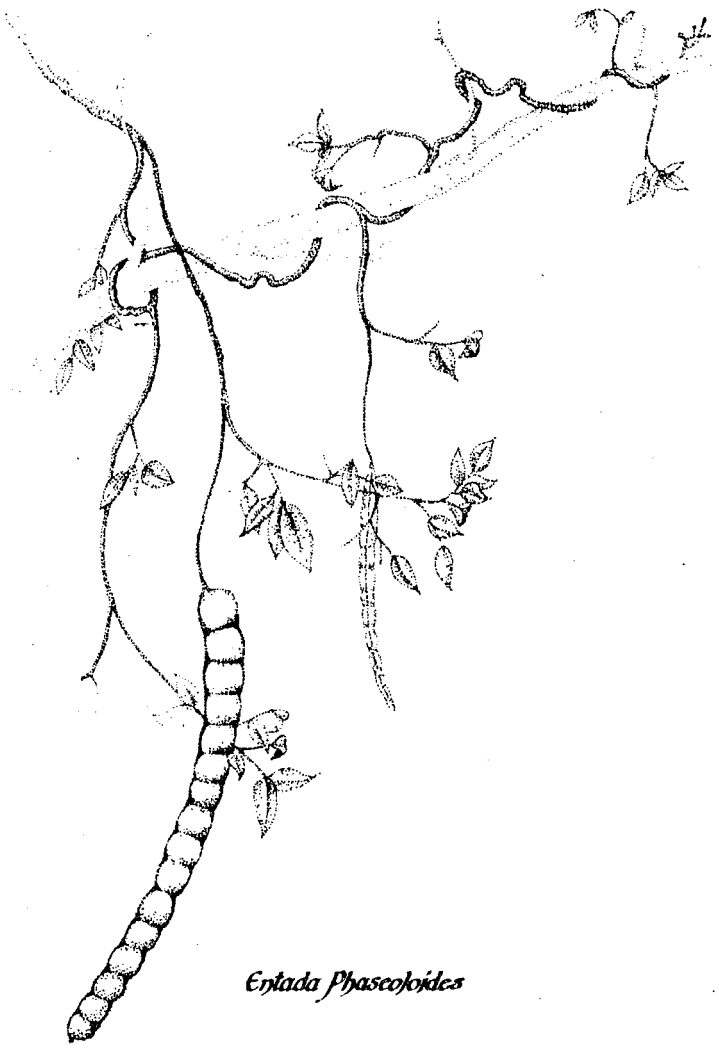


Illustration by Betty Hinton, from Australian Medicinal Plants by E.V.Lassak & T.McCarthy (1983). Methuen Australia, North Ryde. (Reprinted 1983, 1984. Retails c. $33.)

SOCIETY BUSINESS

MINUTES OF THE 10th GENERAL MEETING

of the

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY

The 10th General Meeting of the Society was held at Queensland University, Brisbane, on Tuesday 26 August 1986 at 4 pm.

The President, Dr Bryan A. Barlow, welcomed the 31 members present, most of whom were also attending the joint Ecological Society of Australia/ ASBS conference on "The Ecology of Australia's Wet Tropics".

Apologies were received from Dr Helen Hewson, Dr Philip S. Short and Dr Judy G. West.

1. Minutes. The minutes of the 9th General Meeting were accepted as published in ASBS Newsletter 42: 1-6 (1985). [Moved Alex George; seconded Barbara Briggs. Carried.]

2. President's Report. The President, Bryan Barlow, reported as follows:

This report presents a brief review of the activities of the Society over two terms, as there was no Presidential Address at the 9th General Meeting.

The Society has enjoyed a period of consolidation which augers well for the future. We have had a succession of symposium meetings which have all been well supported and successful in achieving their aims. They include:

Cladistics Meeting	Canberra	1984
Alpine Symposium	Thredbo	1985
Boden Conference	Thredbo	1986
Wet Tropics Symposium	Brisbane	1986

The Society has become a founding corporate member of the Federation of Australian Scientific and Technological Societies (FASTS). It has also taken positive steps towards becoming incorporated - an essential step in view of the somewhat higher profile of the Society both in its activities and in its finances.

Activity in publications has continued. The Flora of Central Australia has been reprinted, and a revised issue is in hand. The volume of the Alpine Symposium has been published. The Proceedings of the Boden Conference are being prepared for publication by the Society in Newsletter format. And the Newsletter itself has reached new high standards of production and content.

The Society's financial position is sound. I would like to pay tribute to Philip Short, the retiring Treasurer, for very dedicated and capable handling of the Society's funds.

Membership has remained steady, with many new members enrolled. This is a good sign at a time when the workforce in systematic botany is static or even diminishing.

We have had limited success in organizing integrated meetings with other Socities. These include joint symposium meetings with the

Australasian Pollination Ecologists Society and the Ecological Society of Australia.

Systematic botany has achieved some (albeit defacto) representation (at the vascular plant level) in science administration with the election of Dr Lawrie Johnson to the Australian Academy of Science and perhaps with my own appointment to the Academy's National Committee for Plant Sciences.

We have had good, active Councils in the last few years, and equally good prospects exist with our incoming Council. I would like to put on record my appreciation of the support of the Executive, Council Members and Editors during this period for the sterling work they have done for the Society and its objectives.

3. Treasurer's Report. On behalf of Philip Short, Don Foreman presented the following report for the financial year of 1985 (1 Jan. - 31 Dec.) and an interim report for 1986 to 31 July (see pp. 17-18). The continued strengthening of the Society's financial position is clear from these reports, and the President paid tribute to Philip's careful handling of the Society's funds during his term as Treasurer. [Moved by Roger Hnatiuk, seconded by Chris Quinn, that the reports be accepted. Carried.]

4. Newsletter Editor's Report. Mike Crisp presented the following report on behalf of Helen Hewson. Members present at the Meeting expressed satisfaction with the standard of the Newsletter and appreciation of the Editors' efforts.

Gordon Guymer was the Newsletter Editor for two thirds of the current term of the Society. When I took over at the beginning of this year I aimed to try to continue the high standard of production which he brought to the Newsletter during his term. I see no reason to be innovative just to satisfy my own ego. In actuality the production of the Newsletter does more to deflate the ego than to inflate it.

On the other hand, inflation in terms of money is a matter for concern. It is an expensive exercise to change Editors between cities. While ever we partake in Registration for bulk postage with Australia Post (to save money) it is necessary to conform strictly with their demands. This involves typesetting for both the cover and envelopes - quite a costly exercise. Fortunately it will be possible to utilize the entire stock of envelopes printed for postage at St Lucia.

Gordon established a pattern of having the cover illustration reflect the taxonomic interests of the President. This is a nicety which I hope to continue.

To date contributions have flowed in unsolicited. This is most encouraging. Nevertheless I am concerned that perhaps we are becoming a bit too journal-like. I would like to see the Newsletter also record the history of taxonomic botany and botanists as it happens. While I tend to hear about 'high-fliers', I fear that I do not hear about the 'beavers'. I am not at all convinced that the membership in general and the Chapter Convenors in particular do enough lateral thinking in this regard.

5. Incorporation of the Society. Michael Crisp, who is acting on behalf of Council in seeing the Society through incorporation procedures, reported that the second of 6 necessary steps was under way. A response is awaited from the ACT Corporate Affairs Commission. The timing of the procedures had been carefully arranged in relation to the General Meeting to ensure that the necessary changes to the Constitution could be put to the membership by the Meeting for postal ballot.

SUMMARY OF THE TREASURER'S REPORT FOR THE FINANCIAL YEAR OF 1985

CREDIT

Balance brought forward (31.xii.1984)	At Bank: $2,604.60		$ 9,604.60
	On Deposit: $7,000.00		
Bank Interest: Term Deposit Received:	$ 504.56		$ 966.24
Accrued:	$ 348.68		
Commonwealth Savings Bank:	$ 113.00		
Subscriptions			$ 4,785.89
Royalties from the 'Flora of Central Australia'			$ 7,492.50
Royalties from 'Evolution of the Flora and Fauna of Arid Australia'			$ 222.22
Alpine Biota Symposium:			$ 2,492.80
Return of deposit from Ansett Airlines	$ 300.00		
Profit from Registration	$2,192.80		
Advertisements in Newsletter			$ 90.00
Boden Conference			$ 500.00
Subscriptions for CSIRO Journals			$ 345.00
TOTAL INCOME			$26,499.25

DEBIT

Printing of Newsletters		$ 1,786.00
Newsletter 41	$430.00	
Newsletter 42	$420.00	
Newsletter 43	$516.00	
Newsletter 44	$420.00	
Postage and other costs associated with Newsletter		$ 430.53
Postage Newsletter 41	$ 60.71	
Postage Newsletter 42	$ 86.87	
Postage Newsletter 43	$104.68	
Postage Newsletter 44	$ 79.87	
Postal Registration	$ 30.00	
Typing	$ 68.40	
Postage Expenses for W.A. Chapter		$ 34.98
Alpine Biota Symposium		$ 900.00
Travel costs for H. Connor	$200.00	
Typing costs for Proceedings	$700.00	
Travel costs for Council Meetings (held at Thredbo and Adelaide)		$ 400.00
G.P. Guymer	$100.00	
R. Henderson	$300.00	
Payment to Federation of Australian Scientific and Technological Societies		$ 150.00
Payment to Solicitors re Incorporation Advice		$ 75.00
Boden Conference - payment to Charles Jeffrey (includes $3.00 Bank charge for conversion to Pounds Sterling)		$ 1,253.00
Bank/Government Charges		$ 10.72
TOTAL EXPENDITURE		$ 5,040.23
Balance - At Bank	$ 4,110.34	
On Deposit	$17,348.68	$21,459.02
TOTAL BALANCE		$26,499.25

AUDITOR'S REPORT:

An examination of the books and records for the financial year ending 31/12/1985 reflects a true and fair view of the financial position of Australian Systematic Botany Society.

A.C. LUCAS, FASA - CPA

ASBS BALANCE SHEET 1 Jan. '86 - 31 July '86

CREDIT			
Balance brought forward (31.xii.1985)	At Bank	$ 4,110.34	$21,459.02
	On Deposit:	$17,348.68	
Bank Interest: Term Deposit Received:		$ 1,023.17	$ 1,248.72
Commonwealth Savings Bank:		$ 225.55	
Royalties from 'Evolution of the Flora and Fauna of Arid Australia'			$ 161.43
Boden Conference			$ 4,920.00
Subscriptions			$ 3,062.18
TOTAL INCOME			$30,851.35

DEBIT			
Printing of Newsletters			$ 1,242.00
Newsletter 45	$476.00		
Newsletter 46	$350.00		
Newsletter 47	$416.00		
Postage and other costs associated with Newsletter			$ 798.54
Postage Newsletter 45	$ 83.12		
Postage Newsletter 46	$ 97.95		
Postage Newsletter 47	$ 98.47		
Postal Registration	$ 36.00		
Envelopes	$320.00		
Typing	$163.00		
Tropical Symposium & N.T. Burbidge Memorial Lecture			$ 700.00
D.E. Symon	$500.00		
L. Haegi	$200.00		
Boden Conference			$ 5,855.00
Subscriptions for CSIRO Journals			$ 345.00
Bank/Government Charges			$ 7.20
TOTAL EXPENDITURE			$ 8,947.74
Balance - At Bank		$ 4,554.93	
On Deposit		$17,348.68	$21,903.61
TOTAL BALANCE			$30,851.35

N.B. This account sheet not audited.
Compound Interest on one of the term deposits has not been ascertained.

6. New Constitution. [a] On behalf of Council, Rod Henderson tabled copies of a draft new Constitution and Rules document prepared by the Constitution Committee, of which he is Chairman. A previous draft had been published in the ASBS Newsletter 46: 13-21 (1986) and had been modified in accordance with comments and suggestions received from members. The document as recommended by Council to the Society included further minor changes explained to the Meeting by Rod. After some discussion and clarification of some points, it was moved [by Rod Henderson, seconded by Michael Crisp] that the new Constitution and Rules (as presented to the Meeting, with modifications made by Council indicated), be put to the Membership for adoption (in place of the existing Constitution) by postal ballot. [Carried unanimously.]

[b] Rod Henderson then enlarged on a proposal for Honorary Membership which had been included in the original draft of the Constitution and Rules, but had been removed because of comments received from Members. Laurie Haegi spoke to an alternative proposal for recognition by the Society, in different ways, of service to plant systematics and to the Society. Since it was clear that further discussion of this subject by the Membership was desirable, the proposal was not submitted as part of the proposed new Constitution and Rules, but would be submitted to the Newsletter in order to promote comment from other Members.

7. Subscription rate. The President informed the meeting that despite a healthy financial position the Society faced increasing recurrent costs which should be met from membership fees. As decided at the last General Meeting the Society had become a corporate member of the Federation of Australian Scientific and Technological Societies, which involved a capitation fee. The initial fee of $1.50 per member for the period January-June 1986 would be carried by the Society but the current fee of $2.50 per member for 1986/87 was now due. In addition there had been a slight increase in the cost of producing the Newsletter, and with higher postage costs, increased distribution costs were inevitable. On this basis Council recommended an increase in the membership fee from $15 to $20, on the understanding that reductions to $16 (previously $13) for early payment and $12 (previously $10) for student members would be offered. In discussion Council was asked to consider retaining the $10 fee for full-time students, in view of the small number of student members. [Moved by the President from the Chair that the membership fee for the coming term be set at $20. Carried.]

8. Future meetings. The President drew the attention of the Meeting to a proposal by Philip Short that the Society hold a symposium on the history of botanical exploration in Australia in Melbourne in May 1988. It would be possible and appropriate for the Society to hold its next General Meeting in conjunction with this. Council supported Philip's proposal but was also seeking the views of members on this or any alternate proposals.

Barbara Briggs reported that discussion by members in Sydney had produced the suggestion that a symposium on modern methods in systematics be held at some time in the future. There was general support for this suggestion from the Meeting, with particular interest in the possibility of holding a one-day meeting, perhaps mid-term, in a workshop setting. In relation to this, the Meeting was reminded of the value and success of the Cladistics Workshop organized by the Canberra Chapter of the Society in 1984. At the conclusion of the discussion there was an expression of general support for a Botanical History Symposium for the Society's next

main meeting.

9. Any other business. Student scholarships. Pauline Ladiges drew the attention of the Meeting to the provision by some other societies for granting small scholarships to students for carrying out field work, particular aspects of projects, or travel. She recommended that the Society consider introducing such a scheme. This suggestion received support from other members present. In responding the President agreed that with its improved financial strength the Society was now in a position to consider such a proposal and asked the Secretary to note it for discussion by Council.

10. Announcement of the incoming Council. The Council of the Society for the coming term is:

President:	Barbara Briggs
Vice-President:	Judy West
Secretary:	Laurie Haegi
Treasurer:	Don Foreman
Councillors:	Michael Crisp
	Rod Henderson

Barbara Briggs proposed a vote of thanks and admiration to Bryan Barlow for his untiring, enthusiastic and dedicated work as President over the past two terms. During and largely due to his Presidency the Society had gone from strength to strength, and now had considerable standing among Australian scientific Societies. The Meeting heartily recorded the Society's warm appreciation of Bryan's contribution.

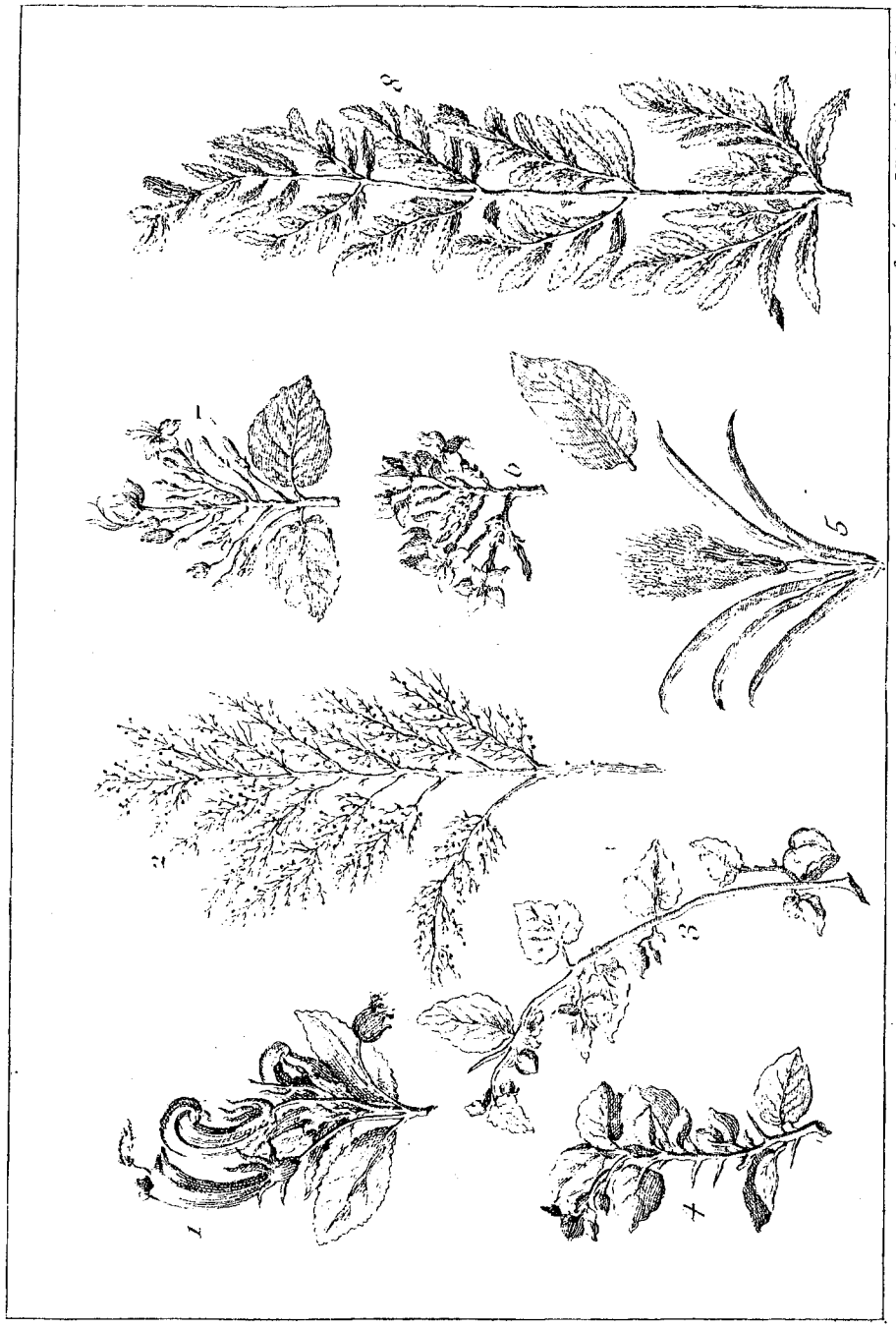
L. Haegi
Secretary

BALLOT ON PROPOSED CONSTITUTION AND RULES

A ballot paper, a draft proposed Constitution and Rules, and notes accompanying the draft are being distributed (unbound) with this issue of the Newsletter. I have now completed "Step 2" of the incorporation procedure. This involved getting the Constitution and Rules checked by the Corporate Affairs Commission. They have required a rewording of one clause of the Constitution. This is detailed in "Notes accompanying the Draft".

"Step 3" required publication in a Canberra newspaper of our intention to incorporate. This is being proceeded with.

M. Crisp



From William Dampier's "A Voyage to New Holland ... 1699"
(French Edition, c. 1715)

RECENT PUBLICATIONS

Recent publications of interest are:-

Encyclopaedia of Ferns Vol.1 by David Jones. Lothian, Melbourne. $50.00

The Greening of Gondwana by Mary E.White. Reed Books, Frenchs Forest. $39.95

Ornamental Rainforest Plants in Australia by David L. Jones. Reed Books, Frenchs Forest. $29.95

Encyclopaedia of Australian Plants Vol.4 (Eu-Go) by Rodger Elliot and David Jones. Lothian, Melbourne. $50.00

Ferns and Allied Plants by Betty D. Duncan and Golda Isaac. Melbourne University Press, Melbourne. $25.00

Flora of South Australia by J. P. Jessop and H. R. Toelken (Eds.) Parts I-IV. SAGPD, Adelaide. $140.00. (Part I, Lycopodiaceae-Rosaceae, $31; Part II, Leguminosae-Rubiaceae, $41; Part III, Polemoniaceae-Compositae, $37; Part IV, Alismataceae-Orchidaceae, $37.) Available from South Australian Government Printing Division, Box 210, PO Plympton, S.A. 5038. Postage to be paid ($3 per volume, $5 per set).

A Bright and Savage Land by Ann Moyal. Collins (Australia), Melbourne. $39.95 (History of Science)

Sir Paul E. Strzelecki by Marian Kaluski. A E Press, Melbourne. $9.95 (History)

Stapylton: With Major Mitchell's Australia Felix Expedition, 1836 by Alan E. J. Andrews. Blubber Head Press, Hobart. $75.00 (History)

ASBS BOOK NOTICE

Flora and Fauna of Alpine Australia: Ages and Origins Edited by Bryan A. Barlow.

The Symposium volume "Flora and Fauna of Alpine Australasia: Ages and Origins", edited by Bryan Barlow, is now available. The volume comprises 30 chapters and about 540 pages, covering topics from landform and climatic history, ecology and adaption to case studies of selected plant and animal groups in alpine Australasia. About one third of the chapters deal with systematics, biogeography and origins of major plant genera or families in alpine Australasia.

The volume is softbound, abundantly illustrated and produced from camera-ready typescript. Recommended retail price is $30. Copies are available to members at a discount of 30%, i.e., at a price of $21. Orders, with payment, can be placed with local chapter convenors or sent direct to Bryan Barlow, Australian National Herbarium, CSIRO, GPO Box 1600, Canberra, ACT 2601. Bulk consignments can then be sent to local chapters for distribution to purchasers.

BOOK REVIEW

The Marine Benthic Flora of Southern Australia PART 1 by H. B. S. Womersley. Government Printer, South Australia, 329 pp. 1984; ISBN 0 7243 4552 3; price $A16.50 plus postage (750 g).

It is now two years since the publication of Part 1 of the Marine Benthic Flora of South Australia, sufficient time to prove the book as useful in practice as was anticipated. Although the book covers only the geographical area referred to as the Flindersian biogeographical province (that is the southern Australian coastline from Cape Naturaliste, W.A., to the N.S.W. - Victorian border, including Tasmania), it makes some important contributions to phycology well beyond that region.

The first section of this volume contains a general introduction (10 pp.), notes on the collection and preservation of marine plants (9 pp.), and a history of studies of southern Australian marine plants (6 pp.). In addition there is a well illustrated chapter on marine ecology (15 pp.) and a summary of marine biogeography of southern Australian coasts (4 pp.). This material is a useful overview intended for senior students rather than research workers.

These introductory chapters are followed by a chapter on seagrasses (64 pp.) by Enid L. Robertson, chapters on the Chlorophyta (175 pp.) and Charophyta (3 pp.), and a glossary, references and an index. It is this taxonomic section which makes the major contribution.

The taxonomic section brings together much that was previously available only in specialist or obscure literature, but the treatment is much more than a re-statement of previously available information. There is a separate summary (p. 10) which provides a listing of the seven new species described and the one new contribution made. The genus Cladophora, in southern Australia, has been also completely revised (van den Hoek and Womersley, pp. 185-213). The keys are all of the parallel or bracketed style with contrasting or mutually exclusive states of characters used, and they are generally easy to use. The key E, the seagrasses, is sensibly based on sterile material. The species descriptions include nomenclatural summaries, a description of the thallus form, with admirable attention given to intraspecific variation and notes on reproduction and life history. Such information as is known is given regarding the Type Specimens. General distribution is noted with greater detail given for the southern Australian region.

The excellence of the book has been widely recognised. In 1985, the Gerald I. S. Prescott Award went to Professor Womersley for this publication. The award is sponsored by the Phycological Society of America, and offered biennially for the outstanding scholarly book or monograph devoted to the algae published in English during the preceeding 2 year period.

This first part of a comprehensive marine flora for southern Australia was long-awaited and much needed. Its appearance has highlighted the need for equivalent information for the rest of Australia as well as the need for both the Phaeophyta and (more daunting yet) the Rhodophyta. It is pleasing to know that further parts of the flora are in preparation.

In an era of slender volumes at inflated prices, this book is a bargain (329 pages for $16.50). It is well-written, it is printed and presented in an easy to use style, and it is well illustrated with excellent drawings and photographs of herbarium specimens. Professor Womersley is to be congratulated : the book is highly recommended.

[Review by R. J. KING, 31 July 1986]

PERSONAL NEWS

Ernest Francis Constable

E.F. Constable is a familiar name on specimens in NSW, mostly collected from New South Wales. Ernie was an intrepid plant collector for Sydney's Royal Botanic Gardens in the days before fieldwork was made easier by official vehicles and better roads. He died on 28 March 1986 aged 83 years.

B.G. Briggs

Andries Kanis (1934-1986)

On the 9th of August 1986, Dr Andries Kanis died at the age of barely 52 years of a very aggressive anaplastic (or undifferentiated) cancer. This had been diagnosed only five weeks before, shortly after he went on sick leave, and he did not to return to his office.

It is difficult for me to express adequately how much the loss of Andrew, as he was known to his friends and colleagues in Australia, means to Australian systematic botany. His death came at a time when he had accumulated much experience and expertise which he was committing to paper for the benefit of the botanical community, and to further the understanding of groups of his special interest.

Andrew was born on 1st July 1934 in Alphen aan den Rijn (The Netherlands) where he received his primary and secondary schooling, receiving the equivalent to the leaving certificate (diploma H.B.S.-D) on 8th July 1952. From October 1952 he studied biology at the Rijksuniversiteit at Leiden. His studies were interrupted by military service from 3rd December 1957 to 2nd September 1959. He passed his examinations for the equivalents of B.Sc. (candidaatsexamen) on 7th July 1959 and of M.Sc. (doctoraal examen) on 3rd July 1962. This formal training at Leiden was connected with tutoring, preparation and supervision of practicals in systematic botany for younger students and part-time teaching in plant taxonomy. Andrew also organized, and looked after, the administrative side of botanical student excursions in which he participated to Central France (1955), the Italian Alps (1956), Northern France (1960) and Scandinavia (1961) to the full satisfaction of his university.

While he was engaged as "doctoraal-assistent" from 4th July 1961, he began his work for his Ph.D thesis. This was interrupted when, in August 1965, he took up the appointment as a botanist in the service of the Dutch Ministery of Foreign Affairs and was stationed in the Forest Department of Sabah (N Borneo), Malaysia, where he became Acting Head of the Sandakan Herbarium from January to October 1966 when he returned to Leiden to resume his Ph.D work.

From 1st January 1967 he was employed by the Dutch Foundation for Research of the Tropics (WOTRO) and worked in the Rijksherbarium at Leiden.

There he completed, under the supervision of Prof Dr C.G.G.J. van Steenis, his thesis "A revision of the Ochnaceae of the Indo-Pacific area" which earned him the degree of "Doctor in de Wiskunde en Natuurwetenschappen" of the State University of Leiden on 20th March 1968. This was published as a thesis and also simultaneously in Blumea 16(1): 1-83 (20 Mar 1968).

Andrew thus had the highly reputed broadly based and rigorous Dutch university training in botany. He was fortunate that his main botany teachers were the demanding professors Dr H.J. Lam (to his M.Sc.) and subsequently Dr C.G.G.J. van Steenis. He could not have been associated with a more outstanding plant systematist and a more renowned plant geographer in the Netherlands in his time.

Andrew's academic training was supplemented well by experience in field work in North Borneo, and was an excellent preparation for his employment as a Research Scientist in the Taxonomy Group of the New Guinea Resources Section in the Division of Land Research of CSIRO. Initially this appointment dated from 8th April 1969 and was for 18 months only. On his way from Holland to Canberra he joined Dr R.D. Hoogland (then at the Research School of Biological Sciences, Australian University Canberra but previously the leader of the group Andrew was to join in CSIRO,) for one week in Ceylon, mainly to collect Ochnaceae.

Andrew commenced his duties at the Herbarium Australiense (the former name of the Australian National Herbarium) on 21st April 1969. The herbaria of the Divisions of Plant Industry and of Land Research were then placed under the curatorship of the late Dr Nancy Burbidge in the former Dvision, but Andrew belonged to the staff of the Division of Land Research where his periods of temporary employment were extended successively until 1974. In the meantime, as funding of the New Guinea surveys was being wound down, it was decided that the Taxonomy Group of the Papua New Guinea Survey Section of the then Division of Land Use Research (formerly Division of Land Research) would transfer to the Division of Plant Industry as from 1st May 1973.

Andries Kanis was naturalized on 10th April 1974 and thus gained Australian Citizenship. He was transferred to a Treasury Position as from 1st July 1974. This meant tenured employment at last. The long time of uncertainty in CSIRO, not having been eligible to secure his superannuation, must have been frustrating for Andrew and his family. However with promotions Andrew had reached the maximum level of Principal Research Scientist in CSIRO before he died.

Andrew was a member of the coordinating committee for the Flora of New Guinea Handbooks and produced a sample treatment in developing detailed guidelines for the collaborators in the series. He served as member of the Editorial Advisory Committee of Brunonia from 1978 to 1983. He was seconded to the position of Australian Botanical Liaison Officer at Kew for the term 1975-76. On that occasion he had short working visits to various herbaria in Europe and the United States.

Andrew's botanical interests are reflected in his publications. (A list of these, together with an account of his collecting activities, will follow in a later issue of the Newsletter). They were concentrated on the families Ochnaceae, Mimosaceae and Amaranthaceae. He was preparing the

treatments of these families (with the exception of the genera Acacia and Ptilotus) for the Flora of Australia. By invitation, he had contributed in the first volume a chapter as an introduction to the system of classification used in that Flora in which he compared most modern systems of Magnoliophyta, accompanied by a valuable and exhaustive bibliography.

In all his activities Andrew was methodical, painstakingly meticulous and accordingly reliable. He tended to ponder over large suites of herbarium specimens which he spread out and rearranged on large benches, absorbing their common features and their differences, in an attempt to perceive the taxa intuitively. Sometimes it may have appeared to the observer that Andrew had difficulty in making decisions, a reflection on his conscientiousness, but finally the results reached with tenacity were indisputably reliable. Only in more recent years, when facilities for experimental work became available, did Andrew become interested in growing plants of difficult complexes (Alternanthera and Gomphrena) from different provenances for comparison of their behaviour under the same condition in a glasshouse. He was keen to supplement his observations with chromosome counts, but unfortunately his time had run out before he could actively develop such supplementary studies.

Besides his active research, Andrew was instrumental in the development of the herbarium library over the past five years. He devoted much skill and knowledge in selecting essentials for acquisition under increasing financial constraints.

Andrew's interest in botanical nomenclature intensified over the years, and I had hoped that he might one day become a member of the Standing Committee for Spermatophyta. At the Sydney Congress in 1981 he was appointed to the inter-congress Orthography Committee and, on request, volunteered much useful thought to the special Committee on Lectotypification.

When, in the course of his duties, he was requested to referee taxonomic botanical papers for journals, Andrew always took great care in an endeavour to improve the writings of colleagues. When asked for his opinion on any subject, Andrew went out of his way to help with often lengthy explanations and advice. As a balanced, quiet, unpretentious and conscientious person, he was always a gentleman, and his helpfulness was greatly appreciated by everyone who called on him.

Andrew was a member of the International Association for Plant Taxonomy, the Royal Botanical Society of The Netherlands, the Museums Association of Australia, a Fellow of the Linnean Society (London), and a Foundation Member of the Australian Systematic Botany Society of which he was Honorary Treasurer from 1973 to 1975.

With his wife, Lisa (Liselotte Andrée, née Dijkema), Andrew shared a general interest in languages (apart from Dutch, he had learned English, French, German, and some Latin at high school). This led him to enrol for two one-year courses in Latin at the Australian National University. He had chosen this language because he felt that, after Dr. Hoogland's departure from Canberra, it would be an advantage that at least one member of the staff had more than a rudimentary knowledge of botanical Latin. Apart from his flair for languages, Andrew became very interested in history and was

especially widely read in matters concerning the botanical exploration of Australia.

Andrew had grown up in a society of European tradition, values and culture in the Netherlands, the country of Rembrandt, van Gogh, Mondriaan, and the Concertgebouw Orchestra. With this background, combined with his broad and thorough formal Dutch education, it comes as no surprise that he also had interests in fields other than systematic botany. Foremost among these was that for the fine arts and especially for music; so he joined the Musica Viva Society soon after his arrival in Canberra. That both his children appear to have chosen musical careers (the daughter, Maike, is at the Sydney Conservatorium where she studies the viola; the son, John Peter, is still at high school), has undoubtedly been encouraged by their father.

In Andries Kanis the Australian National Herbarium, the Australian Systematic Botany Society, and the whole botanical fraternity in Australia has lost a pillar of traditional plant taxonomy on whose professional and institutional loyalty they could rely with absolute confidence. He would have stood up at any time to defend the necessity for continuity in the established practices of systematic botany with a strong emphasis on the proven values of herbarium techniques, and he would have been prepared to remind the authorities of it, should this field of well-documented research become neglected in favour of modern methods of ephemeral fashions.

Many of us have lost a friend and esteemed colleague in the prime of his life.

Hansjoerg Eichler

Gilbert Bocquet

La Direction
des Conservatoire et Jardin botaniques de la Ville de Genève
a le pénible devoir
de faire part du décès subit de

Monsieur GILBERT BOCQUET

Directeur
des Conservatoire et Jardin botaniques de la Ville de Genève
Professeur de botanique systématique
à l'Université de Genève

enlevé en pleine activité le 28 juillet 1986

Il a dirigé notre Institut pendant sept ans, donnant le meilleur de lui-même
et se consacrant entièrement à cette tâche

Mme G. Bocquet
15, rue Sauter
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REQUEST

Euphorbia paralias, how far has it come?

Euphorbia paralias, the sea-spurge, is native to southern European and North African coasts. In Australia, it was first collected on Wardang Island, off Port Victoria, S.A. in 1934 and has since become established along sandy shore sections of the Great Australian Bight and western Bass Strait. Sea-spurge is well-adapted to partial burial by sand and when present in sufficient numbers, is capable both of stabilizing drift sand and building foredunes.

I am involved in research on the autecology of various strandline colonizers and am seeking information on the spread of *E. paralias* as well as on its present distribution limits. Herbarium collections are a prime data source for these purposes, but as *E. paralias* is a relatively recent arrival at Australian shores, I would be very interested to hear from any beachcomber among the readers who has observed this species establishing itself at a particular beach. As far as I know, *E. paralias* has not yet spread beyond Albany, W.A., Wilsons Promontory, Vic., and Flinders Island in Bass Strait. I would be grateful for any information on occurrences outside this range. I can be contacted at CSIRO, C/- Division of Water and Land Resources, GPO Box 1666, Canberra, ACT, 2601, telephone (062) 46 5663, telex 62337.

Petrus C. Heyligers

STOP PRESS

I have been advised by the manager, Publication Sales, C.S.I.R.O., that concessionary prices to members for C.S.I.R.O. Journals will remain at the 1986 levels. Payment needs to be made before 1st December, 1986 to ensure receipt of the Journals required.

Anyone interested should contact Dr. D.B.Foreman
Treasurer ASBS
National Herbarium of Victoria
Birdwood Ave
South Yarra 3141 Victoria

as soon as possible for details.

D.B.Foreman.

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The Society

The Australian Systematic Botany Society is an association of over 300 people with professional or amateur interest in Botany. The aim of the Society is to promote the study of plant systematics.

Membership

Membership is open to all those interested in plant systematics and entitles the member to attend general and chapter meetings and to receive the Newsletter. Any person may become a member by forwarding the annual subscription to the Treasurer. Subscriptions become due on the 1st January.

The Newsletter

The Newsletter appears quarterly and keeps members informed of Society events and news, and provides a vehicle for debate and discussion. In addition original articles, notes and letters (not exceeding ten pages in length) will be published. Contributions should be sent to the Editor at the address given below, preferably typed in duplicate and double-spaced. All items incorporated in the Newsletter will be duely acknowledged. Authors are alone responsible for the views expressed.

Notes

- ☐ The deadline for contributions is the last day of February, May, August and November.
- ☐ ASBS Annual Membership is $13 (Aust.) if paid by 31st March, $15 thereafter. Students (full-time) $10. Please remit to the Treasurer.
- ☐ Advertising space is available for products or services of interest to ASBS members. Current rate is $30 per full page. Contact the Newsletter Editor for further information.
- ☐ All address changes should be sent to the Treasurer or the Editor.

Editor et al.

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