

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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TARO

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The purpose of this communication is to record my observations over a period of some 50 years, of the dark green leafed taro <u>Colocasia esculenta</u>, not to be confused with <u>Alocasia macro-rrhiza</u>, called by Tregear (Tregear, 1926:96) 'American Taro' but more generally known as 'elephant's ear', which with its stalk-like growth topped with pale green leaves, was a common ornamental garden plant prior to the Second World War.

Recent research has centred almost entirely on kumara and fernroot as the principal vegetable food sources of the pre-historic inhabitants of New Zealand and it is only in early records where it is often placed third in importance after kumara and fernroot, that taro and its cultivation receives more than a passing mention.

While the cultivation and utilisation of taro is recorded in a number of sources such as The Maori Race (Tregear, 1926:96), The Old Time Maori (Papakura, 1938:214), The Coming of the Maori (Buck, 1949:92 and 111), perhaps the most informative source is Maori Agriculture (Best, 1925:123-128). The chapter devoted to taro, includes the history and distribution of the plant and all aspects of its cultivation with references from various sources. However in this chapter Best makes no reference, as he does in The Maori As He Was (Best, 1934:178) to what is known as 'elephant's ear' taro which appears to have been introduced mainly as an ornamental garden plant about the 1870's. Illustrations by Matthews (1982:79) of 'elephant's ear', arum lily and taro show the different leaf structures of these plants thus enabling one to easily distinguish the two former plants from taro described by early New Zealand writers and the plants seen by me growing in the Waitakere Ranges and other places.

Historical notes

In the early 1930s, taro as a food was first brought to my attention by men, who, due to lack of work in the depression of those years, were living in old bush shanties or nikau whares in the Waitakere Ranges west of Auckland. They were virtually living off the land and taro corms were used by them as a vegetable either boiled in water like potatoes or after boiling, fried in fat while the young green leaves, after the main rib had been removed, were boiled or steamed as a green vegetable. At this time, the 1930s, I saw taro was growing where grazing stock were unable to reach it, mainly near the mouths of the streams flowing out to the west coast of the Waitakere Ranges or into the Manukau Harbour. Patches of taro were also to be found in streams further back in the bush, but there is the possibility that these were growing from corms taken into the area by bushmen who planted them by their camps.

While collecting information in the 1950s from mean associated with the timber industry in the Waitakere Ranges, I was told that as a base camp back in the bush would be used for periods up to two years, taro would be planted initially to supply a green vegetable and if the corms grew large enough these were eaten also. Mr Peter Thornton, an old time kauri bushman as well as a bullock driver, told me in 1939 that patches of taro grew in the bush back of Dargaville and the Wairoa River and that the corms and green leaves were cooked and eaten by the bushmen at the bush camps while his team of bullocks also relished them. He said that taro was not only to be found near the sites occupied by the Maori people, but that at places along a Maori track taro could often be found.

With this information and the references to taro in the books mentioned, I began, during my trips, to note growing plants not just in the Waitakere Ranges, but further afield. In the Waitakere Ranges taro occurred in small clumps mainly in places where grazing animals could not reach them. I consider it is due to browsing animals having access to taro plus the fact that regenerating bush can smother the plants that so few clumps of taro are found during field surveys today and for this reason the study of taro as an important, virtually all the year round, food supply at least for the inhabitants of northern New Zealand in prehistoric times has been neglected.

A garden experiment

I have had taro growing on my section at 16 Evans Road, Glen Eden, Auckland for the last 32 years. In 1950, I brought back some corms from Little Huia near the north head of the Manukau Harbour and planted them on the banks of the Taimona Stream which flows across my property. These thrived and spread until 1966 when a trench for sewerage reticulation was dug up the valley destroying the taro. However I saved some corms and planted a few at the top of my vegetable garden and more in the shrubbery near the garden. The taro grew well in both these areas but in the shrubbery it later died out as the shrubs expanded their growth and crowded it out. After the sewerage work was completed and the ground settled I planted a corm from the garden on the bank of the stream and the clump of taro growing there today is from this one corm.

I keep this clump from encroaching on the garden by restricting it to an area roughly 70 cm long and 40 cm wide by removing corms from time to time. The average height of the leaves growing in this clump is 65 cm with the average length of leaves being 30 cm although the size varies from season to season depending on the rainfall. The corms average 10 cm long by 6 cm wide. No cultivation or manuring is done to the plants and being at the top of the sloping garden, they receive no run-off of water applied to the garden below. They are out in the open and winter frosts burn back the leaves, sometimes denuding the plants, but with warmer weather they sprout again and by summer the growth is back Heavy frosts can damage the corms but those to average size. covered by dead leaves burned off by earlier frosts survive to sprout again in the spring.

The clump of taro by Taimona Stream which has grown from a corm planted in 1968, is 80 cm in diameter. Its growth is far more vigorous and luxurious than those in the dry garden and as the tubers are bigger, we prefer to eat these although there is virtually no difference in taste or texture between them and the dry garden ones. However, we prefer to cook the young leaves from the dry garden corms.

The leaves of the taro clump beside the Taimona Stream grow to a height of 1.6 m and average 70 cm long by 45 cm wide, the largest being 80 cm long. The corms average 20 cm long by 12 cm wide. Again this clump is not cultivated or manured in any way. Because of the amount of silt deposited along the bed of the stream, it sometimes ceases to flow during a prolonged dry summer but as there is plenty of moisture below the surface, the taro roots tap this source. Also, sheltered as it is by the native bush at the top of the banks, frosts do not burn back the leaf growth to any extent.

Both taro clumps on my property are left to regenerate at will without any transplanting or attention. If the corms, after reaching maturity, are not removed, they sprout two or three cormels on their base and sides and when these are about the size of a plum, the old corm dies and rots away leaving the cormels to expand and produce leaves. Cormels on the outside of a clump, having room to expand, grow to maturity while those facing inwards fight for survival, only the strongest growing to maturity. In this way, a clump of taro growing in conditions as described above, can virtually regenerate itself indefinitely.

Conclusions

The experimental growing of taro in two different situations on my property for over 14 years has shown that taro corms gathered from a clump known to be growing at Little Huia on the northern shores of the Manukau Harbour as early as 1870, has the ability to survive in both wet and dry situations without cultivation or manuring and that even when entirely burnt back by frosts, at least some of the corms or cormels in a clump will grow new leaves in the spring. Also a cormel accidently broken off a parent corm and carried away to a new site, perhaps by a flood in the stream, can establish a clump of taro in its new position.

While the leaf and corm size of my taro does vary from season to season depending on the summer rainfall, they would also, with cultivation and manuring, certainly exceed the average sizes given in this communication.

References

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Matthews, P.	1982	Notice to archaeologists recording taro sites. <u>N.Z.A.A. Newsletter</u> , 25:79-82.
Tregear, E.	1926	The Maori Race. Wanganui, A.D. Willis.