NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

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NGA TARO O AOTEAROA: Colocasia esculenta IN NEW ZEALAND

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The following summary is adapted from a thesis (Matthews, 1984) which may be found in the Piddington Library, Department of Anthropology, University of Auckland.

Published accounts of Colocasia esculenta (taro) in New Zealand consist of limited ethnographic records of its use and cultivation by the Maori, mainly during the nineteenth century, and limited cytological observations. In reports of somatic-cell chromosome numbers the possibility has been raised that New Zealand taro was introduced from Melanesia in pre-European times (Yen and Wheeler, 1968). This suggestion has radical implications for theories of human voyaging and cultural diffusion in the Pacific before written history, since it is generally accepted today that Maori ancestral and cultural origins lie somewhere in eastern Polynesia. The research described is an attempt to determine the historical status of taro presently growing in New Zealand.

Observations of natural growth and dispersal of taro were made and, where possible, associated cultural practices were recorded to provide insight to possible historical explanations. These observations were made during field surveys in Northland, the Hauraki Gulf, and around the East Cape.

First botanical descriptions of New Zealand taro are presented, based on material observed in the field and in a living plant collection. Informal nomenclature has been adopted and the taro are described as 'variants'. Observations of root-tip chromosome numbers were made on fully provenanced accessions held in a living plant collection.

Three variants of taro with major distributions in the North Island were found. These are variant RR (red petiole and rounded blade); variant GR (green petiole and rounded blade); and variant GP (green petiole and pointed blade). The distributions of these variants differ in both geographic range and in relationship to human settlements. Each of the three major variants has a chromosome number of 2n = 42 (in a previous Newsletter article (Matthews, 1982), variant RR appears in Plate 2, and variant GP in Plates 1 and 4). Two variants with the chromosome number 2n = 28 are reported, but have little or no present importance in the areas surveyed (one of these is shown in Matthews, 1982, Plate 3, and now has the collection number AKL 34 for identification).

The predominance of taro with 2n = 42 lends circumstantial support to the suggestion that it is of pre-European introduction. The apparently minor distribution found for taro with 2n = 28 is puzzling and cannot yet be explained.

Fertile seed production is reported for variant GP, and indicates that the distribution of this variant may involve natural seed dispersal as well as dispersal of vegetative parts by people or water. If seed have been produced to the extent that they can be found in archaeological contexts, the problem will arise of whether seed found in such contexts represent natural or cultivated populations. Nevertheless, the discovery of identifiable taro seed in any pre-European context would be of major importance. A sample of seed has been given to the Department of Anthropology, University of Auckland, for future reference.

Records of taro sites have been lodged with both the Herbarium, Department of Botany, University of Auckland and with the Auckland regional archaeologist of the New Zealand Historic Places Trust. Further records of taro in both archaeological and non-archaeological contents may be given to either location. Specimens representing the different variants found during the study may be seen at the above herbarium. Many areas remain to be surveyed intensively for taro, and some possibility remains for finding a major distribution of taro with the chromosome number 2n = 28.

The author welcomes further correspondence about taro names, use, sites, descriptions, and dates of flowering. Write care of the Department of Botany, University of Auckland; or directly to the address above.

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