

Kuta (*Eleocharis sphacelata*, Cyperaceae), a locally important and highly valued weaving plant

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Abstract

This article introduces and discusses *kuta* (*Eleocharis sphacelata*, Cyperaceae), a tall spikerush found on the margins of shallow lakes in New Zealand, which, although often overlooked, is considered in Northland to be a valuable weaving resource.

Introduction

Kuta (*Eleocharis sphacelata*, Cyperaceae) is a tall spikerush found on the margins of shallow lakes in New Zealand (Figures 1 and 2). Although historical records and oral tradition confirm that harakeke (*Phormium tenax*) has overwhelmingly been the most common fibre plant used by Māori weavers (see, for example, Buck, 1926, p. 61; Wehi, 2005), other plant species, including *kuta*, have been identified in woven articles (Goulding, 1971). Goulding's work (Goulding, 1971), which involved the examination of woven *taonga* in Auckland Museum, testifies to the fact that weavers used a diverse range of plants, from mountain daisies (*Celmisia* spp.) (Wallace, 2002) to moss (Beever & Gresson, 1995). *Tī kouka* (*Coryline australis*), *pīngao* (*Desmoschoenus spiralis*) and *kiekie* (*Freycinetia banksii*) were widely used (Puketapu-Hetet, 1989; Williams & Chrisp, 1992; Herbert & Oliphant, 1992; Bergin & Herbert, 1998) and recent research has investigated some aspects of their traditional management and ecology (see, for example, Walls, 1990; Bergin & Herbert, 1998). To date however very little research has focused on less commonly used weaving plants, or on their comparative importance in different localities. I report here on information relating to *kuta*, an often overlooked weaving resource but one that is considered important by Māori weavers in Northland.

Figure 1: Kuta (*Eleocharis sphacelata*), the tall spikerush growing near a slow flowing stream **Figure 2: Kuta as part of a lake edge community with *tī* (*Cordyline australis*) and harakeke (*Phormium tenax*)**



Research context

The information reported here was recovered during a research project that centred on the traditional management and ecology of harakeke (McAllum, 2005; Wehi, 2005) but also included some material on other weaving plants. That research project included the discussion and analysis of references to weaving and weaving resources in literature, including Māori newspapers, produced from the late 18th century to the early 20th century, and interviews (conducted in 2004) with weavers and elders from Northland.

Naming and identifying kuta

Kuta is generally identified as *Eleocharis sphacelata* (see, for example, Pendergrast, 1987), although some authors have used the name to refer to other species such as the rush *Schoenoplectus tabernaemontani* (previously *Scirpus lacustris*) (Williams, 1971, p. 472; Puketapu-Hetet, 1989). Many other names for *kuta* are recorded, such as *kūkuta*, *kutakuta*, *kōpūngāwhā*, *kūwāwā*, *pūwāwā* and *wā* (Best, 1908; Williams, 1971; Beever, 1991). Other listed names are *pao* and *papao*, as well as *paopao* (Best, 1898). These are likely to be regional variations, although they have not been recorded as such, except for *paopao*, the usage of which Buck noted as from Te Arawa (Buck, n.d.). A further meaning of ‘kuta’ was provided by Williams (1971), that is, a woman’s *maro* (apron) made of *kuta*.

Ecology of kuta

Kuta is an ‘erect emergent’ found on the shorelines of shallow lakes (where it is normal to find a range of tall-growing marginal plants (Clayton, 2002, p. 40)), and other very wet places, generally with acid soils (Moore & Edgar, 1970, p. 188). It is an herbaceous perennial (growing all year round) with photosynthetic stems between 0.75 and 1.2 m long that are capable of aerial resprouting. It has creeping rhizomes, but also reproduces sexually, flowering in spring. The rhizome and lower part of the culm are submerged in the water (Moore & Edgar, 1970, p. 188). The stems are spongy, air remaining trapped in them. It is found in lowland areas throughout New Zealand, but most commonly north of 39°S.

Kuta appears to be locally abundant in Northland, and is found, for example, beside lakes around Kaikohe and Ahipara, including small lakes on private farms. It grows in other lowland temperate parts of the country, such as the Bay of Plenty and Waikato, where it has been described as common along the margins of lakes and slow flowing rivers (Clayton, 2002, p. 39). Although dramatic change to plant compositions may result from the invasion of exotic species, Clayton (2002, p. 45) notes that *kuta* has so far effectively survived because of its particular growth strategies, extending out into quite deep water (up to 2 m) where other emergent species are unable to grow. Sorrell et al. (2002) noted that increased water depth resulted in increased diameter of the tallest culms in predominantly organic substrates. They suggested that mechanical strength is maximised in the short, narrow culms found in shallow water, although the competitiveness of the species is compromised in this shallow water environment. In an Australian study, Asaeda et al. (2006) found that shoots of deep water populations grew year-round but died off in shallow water after the water level receded, with no re-growth afterwards.

***Kuta* as a weaving fibre**

In the South Island, Beattie (1994, p. 54) struggled to identify *kuta* botanically in his conversations with local Māori, describing it as a kind of watercress. A search of the Māori newspapers for *kuta* or *paopao* revealed 56 references to *kuta* and 180 to *pao*, but failed to provide any further useful references to *kuta* as weaving material. In contrast, Best (1898) identified *kuta* as the material in “coarse” floor mats (*whāriki*) in the North Auckland area, an observation repeated by Tregear (1904, p. 229). *Maro kuta*, or garments made to cover the female genital area, were recorded by Best (1898) and Pendergrast (1987). Williams (1971, p. 160) also gave an example of *kuta* use as follows:

Ko te tarutaru ano teteahi ara, no te marohanga e te wahine, he raupo, he toetoe, he kutakuta, he raurekau.¹

while also recording under *pao*:

Ko te maro kuta ka mahia ki te paopao, he mea takiri, ka paiaretia, ka mahia hai maro mo nga wahine² (Williams 1971, p. 258).

Despite a general lack of useful information, Buck included a few detailed comments in his unpublished field notebooks from a trip to Northland at the beginning of the 20th century. He identified mats made from *kuta*, referred to as *tāpou*³ in this area. Further, he recorded that these *tāpou* had a “much softer feel” for resting and sleeping, and added they were “usually covered over with good kiekie and flax mats-for show” before being pulled up from underneath at night. Moreover, he recorded seeing some *tāpou* with patterns, including one with chevrons. It seems, therefore, that *tāpou* were highly regarded for their softness as sleeping mats.

Interviews with Toi Te Rito Maihi, Te Hemoata Henare and other *kaumātua* in Northland confirmed the desirability of *tāpou*. The weavers interviewed did not describe these as the “coarse floor mats” mentioned by Best (1898), although they agreed that patterns are not generally woven into *tāpou*. Instead, as suggested by Buck, they confirmed that *tāpou* are valued for their warmth and softness. One expert weaver had been told that, in the North, *tāpou* were the best class of sleeping mat and hence laid out for *rangatira*; the next best *whāriki* were those of *kiekie* while those made from *harakeke* were generally common *whāriki*.

It seems probable from discussions with Ngāpuhi elders that *tāpou* have been ubiquitous on Northland *marae* for most of the 20th century, as well as centuries prior. They are still seen on many Northland *marae* today, and there is renewed interest in *whāriki* made from *kuta*, both as the number of contemporary weavers continues to grow, and as *whāriki* become worn and need replacing. Additionally, *kuta* was mentioned by weavers as a suitable material for making certain types of cape that are readily identifiable by their golden colour. Other contemporary uses are the weaving of *kuta* hats, and occasional *kete* made from *kuta*.

Traditional management of *kuta*

Descriptions of resource use and management of *kuta* are largely lacking in the historical literature, although Buck (1923) recorded that the “full grown stems of new growth” were cut. Buck also recorded in his unpublished notebooks that *kuta* was cut

and left covered with old mats etc, to flatten them (Buck, n.d.). They were then looked at to see that they were all the same shade of brownish red, and turned to get the same shade before being hung out to dry. He also noted that the *kuta* was often left (i.e. under the mats) for three days (Buck, n.d.). This description is similar to that provided by Puketapu-Hetet (1989) who further noted that the best part of plant for weaving is that which is submerged below water level. Several weavers stated their belief that it is common to dive in deeper water for *kuta* nowadays in order to cut the stems, but that previously there was more *kuta* available in the shallow margins of the lakes.

Expert weavers described a distinct season for harvesting *kuta*, determined in part by the lake water level, as well as water temperature which affected the harvesters. Weavers were very familiar with specific resource areas that they used yearly. It is also apparent that weavers monitored *kuta* growth, as in conversation they talked about height above water as an indicator of when to harvest. When visiting areas of *kuta* they noted the height of *kuta* compared to previous years, and the distribution and coverage of *kuta* in the lake. That is, they informally assessed the population and maintained ‘mind maps’ of the resource from year to year. Some *kuia* noted that it was possible to harvest *kuta* twice a year, depending on growth and regrowth. Harvesting was done by cutting the stems beneath the water. In their view, this was done to encourage new growth in the next year and prevent damage to the plant. Processes carried out in preparation for weaving were also carefully followed, to ensure the stems were dried properly and not bent. Some weavers report handling the *kuta* carefully to ensure as much air as possible remains in the stems.

Discussion

The use of *kuta* by Māori weavers is scarcely noted by early ethnographers, with the exception of Buck’s unpublished notes. There is, however, a strong oral tradition which has maintained an understanding of the use and significance of *kuta*, and this tradition is acknowledged here. Certainly, Best’s description of *kuta* mats as ‘coarse’ does not reflect its use or value in areas such as Northland. Instead, I suggest that *kuta* is so highly regarded as a weaving plant in the north that it could even (notwithstanding its use in other districts) be described as a ‘signature’ weaving plant for the Northland peoples.

Little has been published on the distribution and abundance of *kuta*, or on its general ecology, and how these relate to traditional use. However, the importance of *kuta* as a weaving plant suggests many avenues for future research. For example, further investigation of the relationships between height, strength and lake depth may have implications for harvesting of preferred stems, and indicate which lakes have an abundance of preferred stems, or which lakes have changing water levels which may have adversely affected stem height or strength. Further, the effect of harvesting itself has not been explored. Little information is currently available about *kuta* in other districts, although McGowan (2002) briefly mentioned *kuta* as one of the traditional weaving plants in the Waikato which is now difficult to access. Exploration of issues surrounding the protection of traditional harvesting sites might also be valuable in areas where lakes or water bodies have multiple uses. For example, one *kuta* site at a small lake in Northland, harvested annually by local people, is also used to wash speedboats and for other purposes which may have detrimental effects on the *kuta* population. As well, its palatability to animals may affect local abundance where

stock are grazed nearby. In spite of its importance to weavers, there does not appear to be any co-ordinated monitoring of *kuta* growth, distribution or disappearance.

Further consideration of both the ecology and traditional use of a range of weaving plants will enrich our understanding of Māori weaving, and encourage appropriate management of these plants in the future.

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Endnotes

1. Raupo (*Typha orientalis*), toetoe (*Cortaderia* spp.), *kuta* and raurekau (*Coprosma robusta*) are other plants used to weave the maro of a woman.
2. A possible translation being "Female genital coverings are made with compressed paopao, then bound together in bundles, and fashioned as an apron for women".
3. Interviews with Te Hemoata Henare and Toi Te Rito Maihi, May 2004.

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