Cyperus aromaticus

Nomenclature:
Family: Cyperaceae
Species: *Cyperus aromaticus* (Ridley) Mattf. & Kük.

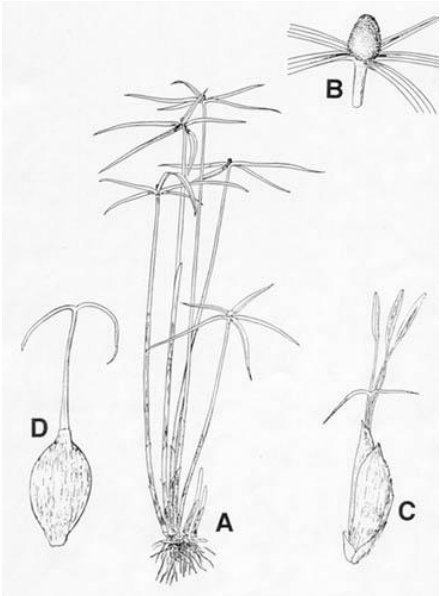
Synonyms:
Kyllinga aromatica Ridley
Kyllinga polyphylla Kunth
Kyllinga erecta Schumacher var. *polyphylla* (Kunth) Hooper
Kyllinga polyphylla (Willd.) ex. Kunth

Kyllinga pinguis is treated as a synonym by Bayer (1992) but regarded as a separate species by Haines and Lye (1983), differing from *C. aromaticus* in having a more elongated inflorescence and culms more widely spaced on elongated rhizome. Although Mobot treats *K. polyphylla* (and *K. erecta* var. *polyphylla*) as separate, I am accepting Haines and Lye's application of synonymy with *C. aromaticus*. Other forms of *C. erectus* (Schumacher) Mattf. & Kük. *Killinga erecta* Schumacher are smaller, also with less densely crowded spikes and without the scabrid glumes. Records believed to be for forms of *C. erecta* other than ssp. *polyphylla* have been disregarded, *e.g.*, in South Africa and Ghana. In East Africa, several forms occur, and the reported occurrence of "*K. erecta*" could apply to ssp. *polyphylla*. They have been discounted from the Holm *et al.* (1979) records for purposes of ranking, but they are included in the distribution data here.

Common Names: greater kyllinga; navua sedge (Fiji); tuise tele and tuise fiti (Samoa); pakopako (Tonga); greater kyllinga and rumput ganda (Malaysia)

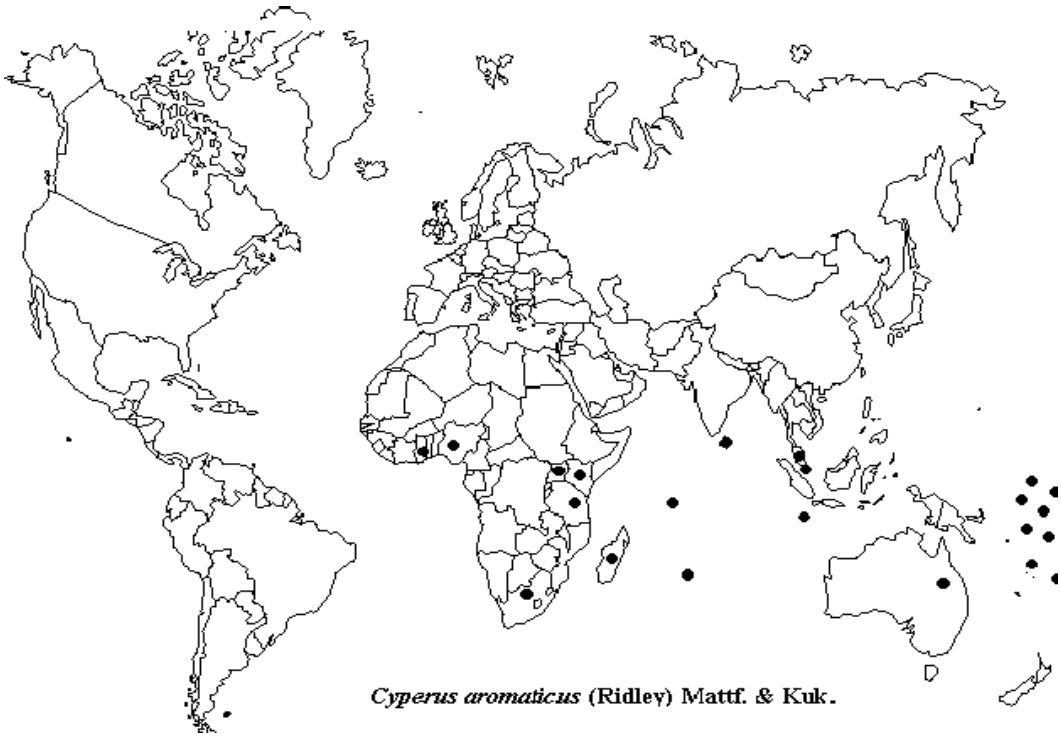
Bayer Code: CYPAT

Description: A robust perennial with a creeping rhizome and densely set culms. Rhizome including scales about 5 mm thick; the scales fairly thick, pale brown to dark purple or blackish, less than 10 mm long. Culms 25–90 cm long and 1–3 mm thick (but wider across the leaf sheaths), the basal part usually covered by purplish sheaths without leaf blades; the upper leaf-sheaths with blades 3–15 cm long and 2–6 mm wide. Involucral bracts 5–8, usually long and spreading; the longest 6–15 cm. Inflorescence an irregular hemispheric to globose head with a central spike and usually several smaller lateral spikes, 7–12 mm in diameter. Spikelets 3–4 mm long, 1- to 2-flowered, but only one producing a nutlet. Glumes yellowish or straw-colored with greenish scabrid midrib and frequently with dark brown dots or streaks especially near the midrib; 3–5 ribs on each side of the midrib. Nutlet lens-shaped, 1.2–1.5 mm long, blackish. In seasonally wet grasslands, roadside ditches, swamp margins and along streams in forests, 950–1,200 in East Africa (Haines and Lye, 1983; PIER, 2001).



Cyperus aromaticus
Kostermans *et al.*, 1987

Distribution: Australia, Christmas Island (Indian Ocean), Fiji, French Polynesia (Tuamoto), Ghana, Kenya, Madagascar, Malaysia, Mascarenes, Mauritius, New Caledonia, Nigeria, Niue, Samoa, Seycelles, Singapore, Solomon Islands, Sri Lanka, Tahiti, Tanzania, Tokelau, Tonga, Uganda, and Vanuatu



G. Fowler, USDA-APHIS-PPQ
Center for Plant Health Science and Technology

Biology and Ecology: Navua sedge is recorded by Holm *et al*. (1979) as a principal weed in Mauritius. It is an extremely aggressive and unpalatable plant, capable of smothering many tropical pasture species and having little value itself, reducing pasture production. It is a strong competitor for nutrients, light, and moisture and at the same time harbors rats, plant pests, and diseases. It is most aggressive in areas where rainfall exceeds 2,500 mm annually. In areas with rainfall less than 2,000 mm and a distinct dry season, navua sedge is usually confined to the wetter low-lying pastures and waste places. It does not establish in areas with a prolonged dry spell (Parsons and Cuthbertson 1992). Waterhouse (1993) records occurrence in rice, pineapple, watermelon, and vegetables. Waterhouse (1997) records it as "widespread and very important" in Fiji, French Polynesia, and Western Samoa. In Fiji it is a declared noxious weed. It is considered a vigorous and aggressive weed of the southeastern coastal and river districts and river valleys spreading throughout Fiji. It is not readily grazed by livestock and when established soon dominates the pastures, reducing yield in terms of milk, butterfat, and beef (Mune and Parham, 1967). In Australia, although previously restricted to Queensland, it now also occurs in New South Wales (Hosking and Groves, 1998). It is on the list of plants prohibited entry to Australia (Australia, 2000). *Cyperus aromaticus* has potential to enter the United States as a contaminant of grass seed and to become a weed of pastures and natural areas in any tropical region.

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