

NAVUA SEDGE

(*CYPERUS AROMATICUS*)

INTRODUCTION

Navua sedge is an aggressive perennial sedge native to tropical Africa. In Northern Queensland it is invading many natural ecosystems and agrosystems such as pastures and sugarcane paddocks. Presently, in Queensland, Navua sedge is not a prohibited or restricted invasive plant under the *Biosecurity Act 2014*, nor in other states.

DESCRIPTION:

Navua sedge is a clump-forming sedge, 30 to 70 cm tall (occasionally up to 2m) with creeping underground stems (or rhizomes) producing shoots at regular intervals and an extensive shallow fibrous root system. The leaves are about 15 cm long and 3 to 5 mm wide and generally clustered at the base of the plant. The flowers are arranged as clusters on top of the flower stalk, triangular in cross section, and surrounded by five or more leaf-like bracts. Typically, three short leaf-like bracts alternating with three long leaf-like bracts surround the flower head. The flower head typically produces 250 seeds (that's up to 500 million seeds per ha) that are about 5 mm long and brown to black when mature. Seeds are 95% viable with a longevity up to 15 years. They can be dispersed by flood water, birds, animals and vehicles.

MANAGEMENT

There is currently only Sempra herbicide registered for the selective control of Navua sedge in pasture, with a minor use permit PER80065 for control in commercial and industrial areas, rights-of-way, footpaths and road verges. Under the permit, Sempra should be applied from February to October at 130 g/ha or 5.2g/100L when the Navua sedge is actively growing with a maximum of 2 applications per year. Sempra is only registered in cane to control nutgrass with a maximum of 200 g/ha per year. Sempra seems to control new Navua sedge seedlings growing from seeds but is not effective to control underground stems from established plants.

Non-selective herbicides permitted to control sedges (*Cyperus spp.*) include glyphosate products. For example Crucial® at 3.6L/ha can be used in fallow to control Navua sedge. Preliminary trials conducted by SRA in fallow seem to indicate that applying glyphosate after the wet season when the sedge is actively growing is the most effective way to kill the underground stems of established plants.

Competition with a healthy and vigorous crop reduces the chance of invasion and establishment of Navua sedge. In contrast a poor crop will encourage Navua sedge establishment.

Slashing, while visually pleasing, readily spreads the seeds to other areas and is not a recommended practice.

Biological control options are currently being explored by Biosecurity Queensland.



A fallow block invaded by Navua sedge in the dry season.



Navua sedge immature seed head.



Mature Navua sedge plants.