GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Paspalum vaginatum***

Paspalum vaginatum 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

Common name Seashore paspalum (English), Biscuit grass (English)

Synonym

Paspalum gayanum , E. Desv.
Digitaria vaginata , (Sw.) Magnier
Panicum vaginatum , (Sw.) Gren. & Godr.
Paspalum boryanum , C. Presl
Paspalum distichum , L.var. *nanum*(Döll) Stapf
Rottboellia uniflora , A. Cunn.
Paspalum distichum , L.var. *tristachyum*(Leconte) A.W.Wood
Paspalum distichum , L. subsp. *vaginatum* (Sw.) Maire
Paspalum distichum , L.var. *littorale*(R.Br.) F.M.Bailey
Paspalum foliosum , (Lag.) Kunth
Paspalum gayanum , E.Desv.
Paspalum inflatum , A. Rich.
Paspalum jaguaense , León
Paspalum kleineanum , J.Presl
Paspalum littorale , R. Br.
Paspalum reimarioides , Chapm.
Paspalum squamatum , Steud.
Paspalum tristachyum , Leconte
Paspalum vaginatum , Sw.var. *littorale*(R.Br.) Trin. ex Büse
Paspalum vaginatum , Sw.var. *nanum*Döll
Paspalum vaginatum , Sw.var. *reimarioides*Chapm.
Paspalum vaginatum , Sw.subsp. *nanum* (Döll) Loxton
Sanguinaria vaginata , (Sw.) Bubani
Digitaria foliosa , Lag.
Digitaria tristachya , (Leconte) Schult.
Panicum littorale , (R.Br.) Kuntze
Paspalum distichum , L.var. *vaginatum*(Sw.) Griseb.

Similar species

Summary

Paspalum vaginatum (seashore paspalum) is a North American grass which now has a pantropical distribution. It has been widely used for landscaping and revegetation and is a common turf grass on golf courses. Paspalum vaginatum has naturalised in coastal salt marshes where it changes the composition of vegetation and in some cases dominates, impacting on fauna communities and estuarine hydrology.

view this species on IUCN Red List

Species Description
Seashore paspalum (*Paspalum vaginatum*) is a perennial stoloniferous grass. It's stolons range from slender and wiry to stout and somewhat fleshy. Its culms are slightly compressed, between 2.5 and 5 (-10) dm long. The sheaths of *P. vaginatum* are often keeled, and have small auricles. Wagner *et al.* (1999; in PIER, 2007) describes the grass as follows:
\"Sheaths often keeled, with small auricles; ligule membranous, ca. 0.5 mm long, with a ring of soft white hairs behind it, the hairs sometimes up to 5 mm long; blades usually stiff, ascending at an uniform angle, 2.5-15cm long, 3-8 mm wide at base, narrower than summit of sheath, apex attenuate, involute, base abruptly contracted. Racemes 2 (-5), opposite or closely approximate, at first erect and appressed together, usually spreading or reflexed at maturity, often subfalcate, 1.5-7.5cm long, rachis naked at base, 1-2 (-2.5) mm wide, triangular, flexuous, margins minutely scabrous; spikelets pale, solitary, imbricate, oblong, 3-4.5 mm long, 1.2-1.5 mm wide; first glume rarely developed, second glume and first lemma equal, thin, 3-7-nerved, the midnerve of both usually obscure, glabrous; first lemma usually transversely undulate, sometimes conspicuously so; second lemma convex, usually 3-5-nerved, apex with a few short, stiff cilia, otherwise glabrous; palea flat, 0-2-nerved, similar to lemma. Caryopsis narrowly obovate, slightly concavo-convex, 2.5-3 mm long, subacute\"

Uses
Haynes *et al.* undated state that seashore paspalum (*Paspalum vaginatum*) makes a high-quality turfgrass because of its minimal fertility and pesticide requirements. Furthermore, its tolerance of a wide range of conditions such as drought, saline or recycled water, varying soil pH, extended periods of low light intensity, flooding or extended wet periods as well as its resistance to insects, disease and wear mean it can be planted and grow where other species would not survive. It is frequently used in landscaping and as a turf grass in golf courses.
P. vaginatum has historically been used for erosion control, as forage food for cattle and horses, by wild geese for feed. It is also used for wetland restoration and site reclamation on oil and gas well sites (Gates, 2003). Loch *et al.* 2003 suggest that *P. vaginatum* is suitable for use as a part of the management of salt-affected lands in Australia. Again, its saline-tolerant and overall survivability traits make it stand out from other turfgrassses.

Habitat Description
Seashore paspalum (*Paspalum vaginatum*) can be found in the coastal salt marshes of the tropics and sub-tropics (USDA-GRIN 2007). In various islands in the Pacific region, *P. vaginatum* is found in coastal sunny areas, near beaches and sometimes on the beach, in brackish marshy areas and mangrove swamps (PIER, 2007). It is best suited to compacted inorganic marsh soils of moderate salinity (USDA-NRCS, 2007), and is tolerant of drought, salt, a wide range of soil pH, extended periods of low light intensity, and flooding or extended wet periods (Haynes *et al.* undated).

Reproduction
seashore paspalum (*Paspalum vaginatum*) propagates asexually using its stolons and rhizomes. It more often propagates through sprigs, plugs and sod than through seeds. (USDA-NRCS, 2007)

General Impacts
Seashore paspalum (*Paspalum vaginatum*) can alter ecosystems in a number of ways. It can form dense monospecific groundcover in brackish marshes and estuaries, and alter the composition of native species. This can lead to changes in invertebrate communities - in the Galapagos it is associated with a move from aquatic to more terrestrial communities (Siemens, 2005), and this in turn can impact on foraging habitat and food resources for waterbirds. In addition, invasion of *P. vaginatum* is associated with an increase in sediment accumulation, changing hydrology in New Zealand estuaries (Shaw and Allen, 2003; Graeme, 2005a, b).

Management Info
Preventative measures: A Risk Assessment of *Paspalum vaginatum* for Hawaii and other Pacific islands was prepared by Dr. Curtis Daehler (UH Botany) with funding from the Kaulunani Urban Forestry Program and US Forest Service. The alien plant screening system is derived from Pheloung *et al*. (1999) with minor modifications for use in Pacific islands (Daehler *et al.* 2004). The result is a score of 7 and a recommendation of: \"Likely to cause significant ecological or economic harm in Hawaii and on other Pacific Islands as determined by a high WRA score, which is based on published sources describing species biology and behavior in Hawaii and/or other parts of the world.\"
Mechanical control and grazing is not an option, as plants will resprout from fragments. Shaw and Allen (2003) recommend that vegetation development be monitored with permanent plots before control is considered. The information available for control of cord grass (*Spartina* spp.) in New Zealand is probably also applicable to *P. vaginatum*. Please follow these links to view complete profiles of *Spartina alterniflora* and *Spartina anglica*, including management information.

Principal source:

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG) with support from ASB Community Trust, New Zealand

Review:

Pubblication date: 2008-04-17

ALIEN RANGE

[1] ARGENTINA
[3] BERMUDA
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[4] COOK ISLANDS
[1] FIJI
[1] INDIA
[1] MALAYSIA
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[1] TAIWAN
[1] TUVALU
[1] VIET NAM
[3] AUSTRALIA
[1] BRITISH INDIAN OCEAN TERRITORY
[1] CHINA
[1] ECUADOR
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[1] INDONESIA
[4] MARSHALL ISLANDS
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[1] PORTUGAL
[1] SOUTH AFRICA
[1] SRI LANKA
[1] TANZANIA, UNITED REPUBLIC OF
[20] UNITED STATES

Red List assessed species 1: VU = 1;

Sterna nereis **VU**

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