Andropogon virginicus 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

Common name broomsedge bluestem (English), broomsedge (English), yellowsedge bluestem (English), whisky grass (English), yellow bluestem (English)

Synonym
Anatherum virginicum , (L.) Spreng.
Andropogon curtisianus , Steud.
Andropogon dissitiflorus , Michx.
Andropogon eriophorus , Scheele
Andropogon tetrastachyus , Elliott
Andropogon virginicus , L. var. *vaginatus* (Elliott) A.W.Wood
Andropogon virginicus , L. var. *genuinus* Fernald & Griscom
Andropogon vaginatus , Elliott
Andropogon virginicus , L. var. *tetrastachyus* (Elliott) Hack.
Andropogon virginicus , L. subvar. *typicus* Hack.
Andropogon virginicus , L. var. *viridis* Hack.
Andropogon virginicus , L. subsp. *genuinus* Hack.
Andropogon virginicus , L. subvar. *genuinus* Hack.
Sorghum virginicum , (L.) Kuntze
Cinna lateralis , Walter
Anatherum virginicum , (L.) Spreng.subvar. *tetrastachyum* (Elliott) Roberty

Similar species *Themeda australis, Themeda triandra*

Summary The perennial bunchgrass (Andropogon virginicus) commonly known as broomsedge sometimes forms continuous cover in boggy, open mesic or dry habitats. It releases highly persistent allelopathic substances which inhibit competition. The dead material provides an excellent fuel for fires, and further it is fire-stimulated, increasing cover dramatically with each fire.

view this species on IUCN Red List

Species Description
\"Perennial tall bunchgrass with tufted stems, 50-100cm tall, branches 1-3 at node. Leaves: Leaf-sheaths more or less tuberculate-hirsute on the margins with long usually lax hairs; ligule yellow-brown, membranous, truncate, white-fringed at edge; blades 40cm long or less, 2-5mm wide, rough or roughish, hirsute on the upper surface near the base; spathes 3-5cm long, extending beyond the racemes. Racemes: 2 (-3-4), 2-3cm long. Spikelets: Sessile spikelet 3-4mm long, twice to half again as long as the internode, the awn straight, 10-15mm long; pedicellate spikelet wanting or rarely present as a minute scale, pedicel exceeding the sessile spikelet. Flowers: Either sessile and hermaphrodite, or stalked and staminate, sterile or not developed.\" (Cronk and Fuller, 1995. In PIER, 2003)

Notes
A serious problem in Hawai‘i - major infestations occur on the windward plain and Pupukea areas of O'ahu, overgrazed ridges in east Moloka'i, and the Puna and Ka'u regions, (PIER, 2003). On French Polynesia exclusion list, (PIER, 2003). Because it retains the phenology of its native habitat, the southeastern United States, its growth is out of synchrony with Hawaii's climatic pattern. It is dormant during the rainy season, which leads to increased erosion in some areas (Mueller-Dombois, 1973 in Smith).

Lifecycle Stages
Flowering begins when plants are 2 or 3 years old, and continues thereafter (Uchytil, 1992).

Habitat Description
Subhumid to humid subtropical areas on a wide range of soils, (PIER, 2003). From sea level to 1,600m in Hawaii, (Smith). Dried material contributes to fire hazard, and reproduction is encouraged by fire, (PIER, 2003). On infertile soils (low in nitrogen or phosphorous), *A. Virginicus* acts as a long-lived competitor, (Uchytil, 1992). Work in Tennesse showed broomsedge to have an average lifespan of 3-5 years and that all plants died within 7 years.

Reproduction
The seed is well adapted to catch in wool and fur as well as in clothing (PIER, 2003). May also be spread on mud on machinery, (PIER, 2003). Seeds are also dispersed by wind and readily establish on exposed soil, (Uchytil, 1992). Each flowering culm may have as many as 50 racemes, and each raceme 8 to 12 spikelets. Germination is relatively high after cold stratification. (Uchytil, 1992)

Nutrition
Broomsedge tolerates low fertile soils with low soil ph and P and K (Peters and Lowance, 1974) Note: Broomsedge does not tolerate close continuous grazing. Neel (1936), Klingman (1971), and Butler (2000) reported cattle grazed broomsedge readily when fertilised and mowed

General Impacts
This perennial bunchgrass sometimes forms continuous cover in boggy, open mesic and dry habitats. It releases highly persistent allelopathic substances (Rice 1972, In Smith). The dead material provides an excellent fuel for fires. It is fire-stimulated; its cover increases dramatically with each fire (Smith, Parman, and Wampler, 1980, in Smith). In areas where it occurs, both fire intensities and acreage burnt have increased, (Smith). Work in Oklahoma in the US showed no change with a single spring burn, an increase with two spring burns, and that it was drastically reduced with a summer or fall burn when soil conditions were dry. *Andropogon virginicus* invades forest and other native vegetation, along tracks, (ESC, undated). Nearly pure stands can persist as a result of competition and allelopathy, (Uchytil, 1992).

Management Info
Preventative measures: A Risk assessment of *Andropogon virginicus* for Australia was prepared by Pacific Island Ecosystems at Risk (PIER) using the Australian risk assessment system (Pheloung, 1995). The result is a score of 13 and a recommendation of: reject the plant for import (Australia) or species likely to be a pest (Pacific).

Principal source: Pacific Islands Ecosystems at Risk (PIER)

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

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ALIEN RANGE

[1] AUSTRALIA
[2] NEW ZEALAND
[1] UNITED STATES MINOR OUTLYING ISLANDS
[1] FRENCH POLYNESIA
[10] UNITED STATES

BIBLIOGRAPHY

6 references found for **Andropogon virginicus**

Managment information

PIER (Pacific Island Ecosystems at Risk), 2003. *Andropogon virginicus*.
Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information.
Available from: http://www.hear.org/pier/species/andropogon_virginicus.htm [Accessed 17 June 2003]

Uchytil, Ronald J. 1992. *Andropogon virginicus*. In: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2002, September). Fire Effects Information System.
Summary: Distribution and occurence in the US, value and use, botanical and ecological characteristics, fire ecology, fire effects, references.
Available from: http://www.fs.fed.us/database/feis/plants/graminoid/andvir/all.html [Accessed 18 Nov 2002].

General information

Eurobodalla Shire Council (ESC), Whisky grass (*Andropogon virginicus*). Eurobodalla Shire Council, Australia.
Summary: Description, habitat and impacts, dispersal, look-alikes, control.
Available from: http://www.esc.nsw.gov.au/Weeds/Sheets/grasses/G%20Whisky%20grass.htm [Accessed 5 Nov 2002]

ITIS (Integrated Taxonomic Information System), 2004. Online Database *Andropogon virginicus*
Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=40456 [Accessed December 31 2004]

Meyer, J.-Y. 2000. Invasive plants in the Pacific Islands. In: The Invasive Species in the Pacific: A Technical Review and Draft Regional Strategy. Sherley, G. (tech. ed). Published in June 2000 by the South Pacific Regional Environment Programme (SPREP).
Summary: Resource that includes the distribution of invasive species throughout the Pacific Islands.

Smith, W. *Andropogon virginicus*. Hawaiian Alien Plant Studies. University of Hawaii, Botany Department.
Summary: Brief description of *A.virginicus* and impacts in Hawaii.
Available from: http://www.botany.hawaii.edu/faculty/cw_smith/and_vir.htm [Accessed 5 Nov 2002].