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Hanna et al.

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(54) ***PENNISETUM PURPUREUM* PLANT NAMED
'PRINCESS'**

(50) Latin Name: *Pennisetum purpureum*
Varietal Denomination: **Princess**

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patent is extended or adjusted under 35
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(65) **Prior Publication Data**

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A01H 5/00 (2006.01)

(52) **U.S. Cl.** **Plt./384**

(58) **Field of Classification Search** **Plt./384**
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

J. M. Ruter; Breeding, Evaluation, and Production of New
Nursery Crops; University of Georgia, Horticulture, Athens,
Georgia; Award information Including Summary, Objec-
tives, and Approach Posted. Jun. 28, 2005; Progress Update
Posted Mar. 14, 2006.*

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(57) **ABSTRACT**

Pennisetum purpureum 'Princess' is a dwarf, purple-
foliated napiergrass. It is a perennial in USDA hardiness
zones 8–10, and a vigorous annual in more northern zones.

1 Drawing Sheet

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Botanical designation: *Pennisetum purpureum* (L.)
Schum. 'Princess'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Pennisetum purpureum*, commonly called napiergrass,
hereinafter referred to by its cultivar name 'Princess'. This
cultivar is grown primarily as an ornamental for landscape
use, and for use as a potted plant.

Seeds of two napiergrass accessions, designated Anae
Roxo CNPGL, were received from CENARGEN/
EMBRAPA in Brazil in April 1996. These were grown under
quarantine in the greenhouse during the winter of 1996–97.
They segregated for a wide variety of green and various
shades of purple plants with a range of vigor. The most
vigorous purple pigmented plant in each accession, given
the Tifton numbers N240 and N241, were selfed. Seeds of
these plants were planted in the field in 1997. The progenies
from these selfed plants again segregated for color and vigor
in the field. Three vigorous plants, from each accession, with
different shades of purple pigment development were veg-
etatively propagated for further evaluation in a napiergrass
maintenance nursery in 1998. In 1999, two accessions,
N241-5 (dwarf) and N241-8 (semidwarf) were selected for
further evaluation.

In 1999, multi-plant observation plantings were made at
Tifton (USDA Zone 8a). Replicated tests were planted in
2000 at Blairsville (USDA Zone 6b), Griffin (USDA Zone
7b), and Savannah (USDA Zone 8b). Plantings were made
at Tifton in 2001 and 2003. All test sites except Tifton were
irrigated. Plants in Blairsville and Griffin did not recover in
2001 following temperatures as low as –17° C. Plants in
Tifton and Savannah survived when exposed to low tem-
peratures of –6° C. and –8° C., respectively.

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In 2003 the name 'Princess' was assigned to N241-5.

'Princess' has been asexually propagated at Tifton by
stem cuttings since 2002. Stem cuttings with two nodes
tended to produce the most shoots, although somewhat
reduced in vigor, based on three-week plant heights. The
characteristics of the cultivar have been stable and repro-
duced true to type in successive vegetative generations.

'Princess' has been compared to *Pennisetum setaceum*
'Rubrum' (unpatented) and to *Pennisetum purpureum*
'Prince' (U.S. Plant patent application Ser. No. 11/151,586).
The 'Princess' plant is similar in height to 'Rubrum', but
with more than a four fold bigger base circumference,
approximately twice the top canopy spread (diameter of
arching leaves at top of plant) and almost double the number
of tillers per plant. The 'Princess' plant is two thirds the
height of 'Prince', with similar base circumference but about
half the top canopy spread. 'Princess' has significantly
longer (190%) and wider (300%) leaves than 'Rubrum', and
shorter (65%) leaves than 'Prince'.

SUMMARY OF THE INVENTION

'Princess' has not been observed under all possible envi-
ronmental conditions, and the phenotype may vary some-
what with changes in light, temperature, soil, and rainfall
without, however, any variance in genotype.

The following traits have been observed and represent the
characteristics of the new cultivar. In combination these
characteristics distinguish 'Princess' from other varieties in
commerce known to the inventors.

- 1) Shorter plant height than 'Prince' and greater plant
circumference and tiller number than 'Rubrum'.
- 2) Shorter leaf length than 'Prince' and greater leaf length
and width than 'Rubrum'.

- 3) Greater vigor under irrigated conditions than 'Rubrum'.
- 4) Greater cold hardiness (USDA Zone 8) than 'Rubrum'.

BRIEF DESCRIPTION OF DRAWINGS

The accompanying illustration shows characteristics of the new cultivar in a photograph as true to color as is reasonable to make in illustrations of this nature.

FIG. 1. A two-year-old plant growing in full sun in the ground at Savannah, Ga. (Aug. 1, 2002). The plant is 142 cm high, with a base circumference of 352 cm.

BOTANICAL DESCRIPTION OF THE PLANT

A detailed description of 'Princess' follows. Colors are based on The Royal Horticulture Color Chart 2001 edition. Measurements/characteristics were taken from one, two, and three-year-old plants grown in the ground under full sun at Tifton, Ga. (USDA Zone 8a). Measurements are the average of 5 to 10 samples.

Classification:

Botanical.—'Princess' is a cultivar of *Pennisetum purpureum*.

Parentage.—Seed from unknown napiergrass accessions.

Propagation.—Vegetatively by stem cuttings.

Plant: The plant is perennial in USDA hardiness zones 8–10, and can be grown as a vigorous annual in more northern zones.

Size.—The height of the plant ranged from 65 to 126 cm under different environmental conditions, with an average height of 92 cm. The base circumference ranged from 123 to 353 cm, with an average of 188 cm, with 40 to 79 tillers, averaging 55. The top canopy spread, or diameter of arching leaves at the top of the plant ranged from 99 to 182 cm, with an average of 127 cm.

Vigor.—The plant is quite vigorous, and produced 40 tillers in one year under non-irrigated conditions, and twice that number of tillers under irrigated conditions.

Two or three node cuttings with foliage removed root well in 8.3 cm liner pots, with rooting percentages in excess of 90%. Well rooted liners shifted from 8.3 cm pots to #5 (19.0 liter) containers in mid-April produced salable plants at a

commercial nursery in 40 days. After cutting back, plants were again salable after 57 days. Hard pruning to control plant size results in good regrowth.

Leaf/stems:

Initial leaves on 'Princess' emerge green (137B) on adaxial and abaxial surfaces with purple (187D) margins and purple midrib (187C on adaxial and abaxial surfaces). The abaxial blade surface rapidly becomes mottled, a mixture of purple (187D) and green (137B) and then emerges purple (187C on adaxial and abaxial surfaces) from the whorl. The leaf blades are flat, narrow, pointed at the end, sessile to the stem, and connected to the stem internode via the leaf sheath. The inside of the collar is lined with abundant 1 mm long trichomes. Stems of 'Princess' have bloom (155C) on the stems, trichomes (0.5 to 1 mm long) on the leaf sheath, trichomes (3 mm long) 5 cm up the margin of the blade from the collar, and sparse trichomes (less than 1 mm long) on the adaxial surface of the leaf blade. Leaf margins have inconspicuous trichomes, and the abaxial surface is smooth. Leaf color best fits the greyed-purple group 187B.

The length of leaf ranges from 48 to 64 cm under different environmental conditions, with an average length of 55 cm. The leaf width ranges from 23 to 38 mm, with an average width of 30 mm.

Flowering: These plants flower under short days, less than 11 hours sunlight per day, and remain vegetative without producing inflorescences in the area of development and proposed use. Plants freeze due to cold temperatures before inflorescences are produced.

Plants are not recommended for landscape use in areas where a hard freeze does not regularly occur by December 1 (USDA 9–11) since reseeding may be an issue, particularly in humid, subtropical environments.

Diseases: Helminthosporium leaf spot has been noted on the foliage in the field and under overhead sprinklers in container nurseries, but control has not been necessary. Two-lined spittlebug (*Prosapia bicinta* (Say)) has also been noted to feed on the bases of field and container-grown plants. In the field, plants should be cut back in the late winter to remove debris that harbors spittlebugs.

We claim:

1. A new and distinct variety of *Pennisetum purpureum* plant, substantially as herein described and illustrated.

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Fig. 1

