



US00PP11104P

United States Patent [19]

Yomo et al.

[11] **Patent Number: Plant 11,104**[45] **Date of Patent: Oct. 19, 1999**[54] **VERBENA PLANT NAMED
'SUNMARIWABA'**P.P. 9,121 4/1995 Tachibana et al. Plt./87
P.P. 9,411 12/1995 Tachibana et al. Plt./87[75] Inventors: **Yasunori Yomo, Yamanashi; Yasuyuki
Murakami, Shiga, both of Japan****OTHER PUBLICATIONS**GTITM UPOVROM Citation for 'Sanmariwaba' As Per JP
PBR 9061, Sep. 4, 1996.[73] Assignee: **Suntory Limited, Osaka, Japan**[21] Appl. No.: **08/923,784**[22] Filed: **Sep. 4, 1997**[30] **Foreign Application Priority Data**

Sep. 4, 1996 [JP] Japan 9061

[51] **Int. Cl.⁶ A01H 5/00**[52] **U.S. Cl. Plt./308**[58] **Field of Search Plt./87, 308**[56] **References Cited****U.S. PATENT DOCUMENTS**P.P. 1,920 3/1960 Fujimoto Plt./87
P.P. 8,995 11/1994 Tachibana et al. Plt./87
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P.P. 9,059 2/1995 Tachibana et al. Plt./87
P.P. 9,085 3/1995 Tachibana et al. Plt./87*Primary Examiner*—Howard J. Locker
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Mathis, L.L.P.[57] **ABSTRACT**Disclosed herein is a verbena plant which has a broad
spreading growth habit and long stems. The plant forms
flowers in clusters with a great profusion of blooms. The
blooming period is late April to November and flowering
duration is long. The entire plant remains in bloom for an
extended period of time. The flower size is large and the
petals of the flowers are red-purple. The plant is highly
tolerant to heat, and exhibits a high resistance to pests and
diseases, particularly powdery mildew, and a high resistance
to rain.**2 Drawing Sheets****1****BACKGROUND OF THE VARIETY**The present invention relates to a new and distinct variety
of *Verbena hybrida* plant obtained from crossing a *Verbena*
hybrida plant named 'Showtime Purplered' (non-patented in
the United States) (♀) and a wild type of verbena plant
Verbena peruviana (♂) native to Brazil.The verbena is a very popular plant and is used for flower
bedding and potting in the summer season. There are only a
few varieties of verbena plants which have a spreading
growth habit, much branching, a large number of flowers in
a cluster and which have a high resistance to rain, heat, cold,
and diseases. Accordingly, this invention was aimed at
obtaining a new variety having a spreading growth habit,
strong branching, a large number of flowers in a cluster, a
flower of large diameter, a high tolerance to heat and cold,
and resistance to diseases and pests, and also having purplish
red colored petals.The new variety of verbena plant according to this inven-
tion originated from crossing a *Verbena hybrida* named
'Showtime Purplered' (♀) and a wild type of verbena plant
Verbena peruviana (♂) native to Brazil.Initially, 45 seedling were obtained in the autumn of 1994,
from crossing 'Showtime Purplered' as the female parent
and a wild type of verbena plant (*Verbena peruviana* f.
rosea) as the pollen parent in May of 1994. From this
crossing, 7 seedlings were selected in view of their spread-
ing growth habit, were propagated by cuttings, and then
were grown as a trial in flower beds and planters beginning
in the spring of 1995. Finally in the autumn of 1995 the
botanical characteristics were examined, using the similar
varieties 'Sunmariba' (U.S. Plant Pat. No. 10,801) and
'Derby Salmon Rose' (non-patented in the United States) for
comparison, one seedling was selected. As a result, it was
concluded that this verbena is distinguishable from any other
variety, whose existence is known to us, and is uniform and**2**stable in its characteristics. The new variety of verbena plant
of the present invention was named 'Sunmariwaba'.In the following description, the color-coding is in accor-
dance with the Horticultural Colour Chart of The Royal
Horticultural Society, London, England (R.H.S. Colour
Chart), and the Inter-Society color Council-Nation Bureau
of Standard Color Name (I.S.C.C.—N.B.S. Color Name). A
color chart based on The Japan Color Standard for Horti-
cultural Plant (J.H.S. Color Chart) is also added for refer-
ence.'Showtime Purplered' was used as the female parent when
obtaining this new variety 'Sunmariwaba'. 'Showtime Pur-
plered' has an erect growth habit and is publicly available.The pollen parent used in obtaining this new variety
'Sunmariwaba' was a wild type of *Verbena peruviana* native
to South Brazil. This wild type of verbena plant is presently
maintained at the Hakushu Nursery Center of SUNTORY
Ltd., 2913-1 Torihara, Hakushu-cho, Kitakoma-gun, Yama-
nashi-ken, Japan. The main botanical characteristics of this
pollen parent are as follows when grown at the same
location.

Plant:

Growth habit.—Spreading.
Plant height.—10–20 cm.
Plant width.—100–150 cm.

Stem:

Diameter.—1.0–2.0 mm.
Anthocyanin pigmentation.—Present.
Branching.—Medium.
Pubescence.—Medium.
Length of internode.—3.0–4.0 cm.

Leaf:

Phyllotaxis.—Opposite.
Shape of blade.—Hastate.

Length.—3.0–4.0 cm.

Width.—1.5–2.0 cm.

Depth of incision.—Shallow.

Color.—Moderate olive green (R.H.S. 146A, JHS 3509)

Pubescence.—Slight.

Flower:

Facing direction.—Upward.

Outward curvature of petal.—Slightly curved.

Diameter.—2.0–3.0 cm.

Height.—20–30 mm.

Color.—Strong reddish purple (R.H.S. 77B, JHS 8911).

Color presentation.—Substantially even.

Overlapping of petals.—Opened.

Flower cluster.—30–40 mm in length; and 50–60 mm in diameter.

Calyx.—1.5–2.0 cm in length.

Anthocyanin pigmentation of calyx limb.—Absent.

Peduncle.—1–2 mm in thickness; and 3.0–5.0 cm in length.

Number of flowers.—Plentiful (approximately 10–14)

Reproductive organs.—1 pistil and 4 stamens.

Flower fragrance.—Absent.

Flowering duration.—Short.

Physiological and ecological characteristics: High resistance to diseases and pests, and high tolerance to heat and cold.

The 'Sunmariba' variety was used as a comparison for this new 'Sunmariwaba' variety. The main botanical characteristics of the 'Sunmariba' variety are as follows when grown at the Hakushu Nursery Center of SUNTORY Ltd., 2913-1 Torihara, Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan.

Plant:

Growth habit.—Spreading.

Plant height.—10–20 cm.

Plant extension.—60–80 cm.

Growth.—Very vigorous with abundant branching and great profusion of blooms; and with the entire plant remaining in bloom for an extended period of time.

Stem:

Diameter.—3.0–4.0 mm.

Anthocyanin pigmentation.—Present.

Branching.—Abundant.

Pubescence.—Medium.

Length of internode.—2.0–4.0 cm.

Leaf:

Phyllotaxis.—Opposite.

Shape of blade.—Hastate.

Length.—4.0–5.0 cm.

Width.—2.0–3.0 cm.

Depth of incision.—Shallow.

Color.—Medium olive green (R.H.S. 146A, JHS 3508).

Pubescence.—slight.

Flower:

Facing direction.—Upward.

Outward curvature of petal.—Slightly curved.

Diameter.—1.5–2.0 cm.

Height.—20–30 mm.

Color.—Vivid reddish purple (R.H.S. 80A, JHS 8906).

Color presentation.—Substantially even.

Overlapping of petals.—Opened.

Flower cluster.—30–50 mm in length; and 40–60 mm in diameter.

Calyx.—1.0–2.0 cm in length.

Anthocyanin pigmentation of calyx limb.—Absent.

Peduncle.—1–2 mm in thickness; and 4.0–5.0 cm in length.

Number of flowers.—Plentiful (approximately 13–17).

Reproductive organs.—1 pistil and 4 stamens.

Flower fragrance.—Absent.

Flowering duration.—Long.

Physiological and ecological characteristics: High resistance to diseases and pests, particularly powdery mildew. High tolerance to heat and cold. High tolerance to rain.

The 'Derby Salmon Rose' variety was used as a comparison for this new variety 'Sunmariwaba' variety. The main botanical characteristics of the 'Derby Salmon Rose' variety are as follows when grown at the Hakushu Nursery Center of SUNTORY Ltd., 2913-1 Torihara, Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan.

Plant:

Growth habit.—Semi-erect.

Plant width.—Medium.

Stem:

Anthocyanin pigmentation.—Absent.

Branching.—Medium.

Pubescence.—Medium.

Length of internode.—Medium.

Leaf:

Phyllotaxis.—Opposite.

Length.—Medium.

Width.—Medium.

Blade incision.—Absent.

Color.—Dark green.

Pubescence.—Medium.

Flower:

Facing direction.—Upward.

Outward curvature of petal.—None.

Diameter.—Large

Height.—Medium.

Color.—Vivid red (R.H.S. 52A, JHS 0106).

Color presentation.—Substantially even.

Overlapping of petals.—Closed.

Flower cluster.—Medium in length; and medium in diameter.

Anthocyanin pigmentation of calyx limb.—Present.

Peduncle.—Medium in thickness; and medium in length.

Number of flowers.—Medium.

Reproductive organs.—1 pistil and 5 stamens.

Flower fragrance.—Absent.

Flowering duration.—Medium.

Physiological and ecological characteristics: Weak resistance to diseases, heat and cold. Moderate resistance to pests.

This new 'Submariwaba' variety of verbena plant was asexually reproduced by cuttings at the aforementioned Hakushu Nursery Center of SUNTORY Ltd., 2913-1 Torihara, Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan, and the homogeneity and stability thereof were confirmed. The characteristics of the new variety are fully stable following such asexual reproduction.

SUMMARY OF THE VARIETY

This new variety of verbena plant has a broad spreading growth habit and long stems. The plant is well branched and abundantly forms flowers in a cluster. The blooms are present in profusion. The blooming period is late April to November and flowering duration is long. The entire plant remains in bloom for an extended period of time. The flower size is large and the petal coloration of the flowers is strong purplish red. The plant is highly tolerant to heat, exhibits a high resistance to pests and diseases, particularly powdery mildew, and a high resistance to rain is exhibited.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 depicts a side view of the 'Sunmariwaba' plant of the present invention.

FIG. 2 depicts a close-up view of the flowers of the 'Sunmariwaba' plant of the present invention.

As indicated hereafter, the actual flower coloration is more purple than illustrated in the photographs. Accordingly, reference should be made to the color chart information provided hereafter when specifying flower coloration.

DESCRIPTION OF THE VARIETY

The botanical characteristics of the new and distinct 'Sunmariwaba' variety of verbena plant, are as follows when grown at the Hakushu Nursery Center of SUNTORY Ltd., 2913-1 Torihara, Hakushu-cho, Kitakoma-gun, Yamanashi-ken, Japan.

Plant:

Growth habit.—Spreading.

Plant width.—Broad; approximately 65–90 cm.

Plant height.—Low; approximately 10–15 cm.

Stem:

Diameter.—Medium; 1.7–2.4 mm.

Anthocyanin pigmentation.—Present and the coloration is R.H.S. 7D, JHS 8913.

Pubescence.—Medium.

Branching.—A moderate level of branching is present. Each single branch commonly produces two additional branches. More specifically, a single branch commonly becomes three branches and those three branches commonly produce nine branches, etc.

Color.—R.H.S. 144A, JHS 3507.

Subterranean stem.—Absent. But when the stems contact the surface of soil, the nodes take root in the ground and the plant growth thereby spreads.

Length of internode.—Medium; 2.6–4.7 cm.

Leaf:

Phyllotaxis.—Opposite.

Shape of blade.—Somewhat wedge-shaped with a broader base (as illustrated).

Depth of blade incision.—Shallow.

Blade margin.—Serrate.

Length.—Medium; 2.4–3.4 cm.

Width.—Medium; 1.5–2.6 cm.

Color.—Dark olive green (R.H.S. 146A, JHS 3707) on the upper surface and medium yellow green (R.H.S. 144A and JHS 3513 on the under surface).

Leaf apex.—Mucronate.

Leaf base.—Petiolate.

Pubescence.—Slight.

Petiole.—Present.

Diameter of petiole.—Medium; 0.9–1.6 mm.

Length of petiole.—Short; 2.0–2.8 mm.

Petiole color.—R.H.S. 144A, JHS 3513.

Flower:

Shape of cluster.—Obovate.

Length of cluster.—Medium; 27–47 mm.

Diameter of cluster.—Medium; 48–55 mm.

Facing direction.—Upward.

Outward curvature of petal.—Slightly curved.

Diameter.—Large; 1.5–1.9 cm.

Height.—High to medium; 2.0–2.1 cm.

Color.—Red-purple (R.H.S. 70A, JHS 9508) on the upper surface and purple-violet (R.H.S. 80A, JHS 8906) on the under surface. The petal coloration fades slightly with age.

Eye color.—Yellowish-white R.H.S. 11D, JHS 8601.

Eye size.—small.

Variegation on petal.—Absent.

Color presentation.—Substantially even.

Overlapping of petals.—Separate.

Incision of petal.—Present.

Number of petals.—Medium; 5.

Sepals.—Tubular in configuration.

Length of calyx.—Long; 1.3 cm.

Anthocyanin pigmentation of calyx limb.—Absent.

Color of anther.—Yellow green.

Diameter of peduncle.—Medium; 1.2–1.6 mm.

Length of peduncle.—Short; 21–50 mm.

Color of peduncle.—Strong yellow green, R.H.S. 144A, JHS 3507.

Number of flowers.—Plentiful; commonly 15±2.

Flower bearing.—In a cluster (as illustrated).

Reproductive organs.—1 pistil and 4 stamens.

Pollen.—Brilliant greenish-yellow (R.H.S. 6C, JHS 2704) in coloration.

Flower fragrance.—Absent.

Flowering time.—Early. When planted during March, the plant commonly blossoms from April to November. A bloom cluster commonly is present for approximately 2 to 3 weeks, and an individual bloom within the cluster commonly lasts for approximately 7 to 10 days on the plant.

Flowering duration.—Long.

Physiological and ecological characteristics: High resistance to diseases and pests, particularly powdery mildew. High tolerance to heat and drought. High tolerance to rain. Medium tolerance to cold.

This new variety of verbena plant is most suitable for flower bedding and potting, particularly in planters, and is further excellent for use as a ground cover.

I claim:

1. A new and distinct variety of Verbena plant having the following combination of characteristics:

- exhibits a broad spreading growth habit with long stems,
- forms in abundance clusters of attractive red-purple blossoms that remain on the plant for an extended period of time, and
- exhibits good tolerance to rain, heat, drought, and diseases;

substantially as shown and described.

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Fig. 1



Fig. 2

