



US00PP24145P2

(12) **United States Plant Patent**
Shishido

(10) **Patent No.:** **US PP24,145 P2**
(45) **Date of Patent:** **Jan. 7, 2014**

(54) **DIANTHUS PLANT NAMED ‘SHISHIKA-01’**

(50) Latin Name: *Dianthus speciosus*
Varietal Denomination: **Shishika-01**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 98 days.

(21) Appl. No.: **13/385,287**

(22) Filed: **Feb. 10, 2012**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(52) **U.S. Cl.**
USPC **Plt./282**; Plt./272

(58) **Field of Classification Search**
USPC Plt./282, 272
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Dianthus* plant named
‘Shishika-01’, characterized by its upright and mounding
plant habit; moderately vigorous growth habit; short internodes
and freely branching habit; red purple-colored flowers
with white-colored centers that are positioned above the foliar
plane; and good garden performance.

1 Drawing Sheet

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Botanical designation: *Dianthus speciosus*.
Cultivar denomination: ‘SHISHIKA-01’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Dianthus* plant, botanically known as *Dianthus speciosus*,
grown as a garden plant and hereinafter referred to by the
name ‘Shishika-01’.

The new *Dianthus* plant is a product of a planned breeding
program conducted by the Inventor in Chiba, Japan. The
objective of the breeding program was to develop new freely-
branching and freely-branching *Dianthus* plants with attrac-
tive flower coloration.

The new *Dianthus* plant is a naturally-occurring whole
plant mutation of *Dianthus speciosus* ‘Kahori’, not patented.
The new *Dianthus* plant was discovered and selected by the
Inventor as a single flowering plant from within a population
of plants of ‘Kahori’ in a controlled greenhouse environment
in Chiba, Japan in November, 2006.

Asexual reproduction of the new *Dianthus* plant by termi-
nal cuttings propagated in a controlled environment in Chiba,
Japan since December, 2006 has shown that the unique fea-
tures of this new *Dianthus* plant are stable and reproduced
true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

Plants of the new *Dianthus* have not been observed under
all possible environmental conditions and cultural practices.
The phenotype may vary somewhat with variations in envi-
ronmental conditions such as temperature and light intensity,
without, however, any variance in genotype.

The following traits have been repeatedly observed and are
determined to be the unique characteristics of ‘Shishika-01’.
These characteristics in combination distinguish ‘Shishika-
01’ as a new and distinct *Dianthus* plant:

1. Upright and mounding plant habit.
2. Moderately vigorous growth habit.
3. Short internodes and freely branching habit.

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4. Red purple-colored flowers with white-colored centers
that are positioned above the foliar plane.

5. Good garden performance.

Plants of the new *Dianthus* differ from plants of the muta-
tion parent, ‘Kahori’, primarily in plant habit as plants of the
new *Dianthus* are more vigorous than and not as compact as
plants of ‘Kahori’. In addition, plants of the new *Dianthus* and
‘Kahori’ differ slightly in flower color.

Plants of the new *Dianthus* can be compared to plants of the
Dianthus speciosus ‘Shishi-01’, disclosed in U.S. Plant
patent application Ser. No. 12/069,042, now abandoned. In
side-by-side comparisons conducted in Chiba, Japan, plants
of the new *Dianthus* differed from plants of ‘Shishi-01’ in the
following characteristics:

1. Plants of the new *Dianthus* were larger than and not as
compact as plants of ‘Shishi-01’.
2. Plants of the new *Dianthus* were more vigorous than
plants of ‘Shishi-01’.
3. Plants of the new *Dianthus* were more freely branching
than plants of ‘Shishi-01’.
4. Plants of the new *Dianthus* and ‘Shishi-01’ differed in
flower color.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall
appearance of the new *Dianthus* plant showing the colors as
true as it is reasonably possible to obtain in colored reproduc-
tions of this type. Colors in the photographs may differ
slightly from the color values cited in the detailed botanical
description which accurately describe the colors of the new
Dianthus plant.

The photograph at the bottom of the sheet comprises a side
perspective view of typical flowering plants of ‘Shishika-01’
grown in a container.

The photograph at the top of the sheet is a close-up view of
a typical flowering plant of ‘Shishika-01’.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observa-
tions and measurements describe plants grown during the

summer in 16.5-cm containers in a polyethylene-covered greenhouse in Bonsall, Calif. under environmental conditions and cultural practices which approximate those generally used in commercial *Dianthus* production. During the production of the plants, day temperatures ranged from 29° C. to 37° C., night temperatures ranged from 18° C. to 21° C. and light levels averaged 5,000 foot-candles. Plants were pinched one time and were two months old when the photographs and the detailed description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Dianthus speciosus* 'Shishika-01'.

Parentage: Naturally-occurring whole plant mutation of *Dianthus speciosus* 'Kahori', not patented.

Propagation:

Type.—Terminal cuttings.

Time to initiate roots, summer.—About two to three weeks at 22° C. to 27° C.

Time to initiate roots, winter.—About three to four weeks at 18° C. to 23° C.

Time to produce a rooted young plant, summer.—About four weeks at 22° C. to 27° C.

Time to produce a rooted young plant, winter.—About six weeks at 18° C. to 23° C.

Root description.—Medium thickness, fibrous; white in color.

Rooting habit.—Moderate branching; medium density.

Plant description:

Plant and growth habit.—Upright and mounding plant habit; freely clumping; vigorous growth habit.

Plant height (soil level to top of flowers).—About 13.5 cm.

Plant height (soil level to top of foliar plane).—About 9 cm.

Plant diameter (spread).—About 18 cm.

Lateral branch description.—Branching habit: Freely-branching growth habit with about 48 lateral branches developing per plant; pinching enhances lateral branch development; dense and bushy growth habit. Length: About 7.5 cm. Diameter: About 1.5 mm. Internode length: About 9 mm. Texture: Smooth, glabrous. Color: Close to 145A; with development, color becoming closer to 199A.

Foliage description.—Arrangement: Opposite, simple. Length: About 4.2 cm. Width: About 3 mm. Shape: Lanceolate. Apex: Acute. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Venation pattern: Parallel. Color: Developing leaves, upper surface: Close to 137B. Developing leaves, lower surface: Close to 137C. Fully expanded leaves, upper surface: Close to N137C; venation, close to N137C. Fully expanded leaves, lower surface: Close to 137A; venation, 137C. Petioles: Length: About 3 mm. Diameter: About 2 mm. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: Close to 145B.

Flower description:

Flower type and flowering habit.—Single rotate terminal and axillary flowers; freely flowering with typically two flowers developing per lateral shoot; flowers positioned above the foliar plane; flowers face upright.

Fragrance.—Faintly fragrant; clove-like.

Natural flowering season.—Flowering is continuous during the spring in Southern California; plants begin flowering about six to eight weeks after planting.

Flower longevity.—Flowers last about four to five days on the plant; flowers persistent.

Flower diameter.—About 3 cm.

Flower depth.—About 2.7 cm.

Flower buds.—Length: About 2.3 cm. Diameter: About 5 mm. Shape: Oblong. Color: Close to 75B to 75C.

Petals.—Quantity and arrangement: About five arranged in a single whorl. Length: About 3 cm. Width: About 1.5 cm. Shape: Roughly obdeltoid. Apex: Rounded; praemorse. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Color: When opening, upper surface: Close to 71C. When opening, lower surface: Close to 75A. Fully opened, upper surface: Close to 71B; towards the base, close to 157C to 157D. Fully opened, lower surface: Close to 73A.

Sepals.—Quantity and arrangement: Five fused arranged in a single whorl. Length: About 1.5 mm. Width: About 2 mm. Shape: Lanceolate. Apex: Acuminate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper surface: Close to 147C. Color, lower surface: Close to 146A.

Peduncles.—Length: About 3.5 cm. Diameter: About 1 mm. Strength: Strong. Texture: Smooth, glabrous. Color: Close to 137A.

Reproductive organs.—Stamens: Quantity: About ten per flower. Filament length: About 1.1 cm. Filament color: Close to NN155D. Anther length: About 2 mm. Anther shape: Oblong. Anther color: Close to 156A. Pollen amount: Scarce. Pollen color: Close to 156C. Pistils: Quantity: One per flower. Pistil length: About 1.5 cm. Stigma shape: Bi-parted. Stigma color: Close to 85C. Style length: About 6 mm. Style color: Close to 85D. Ovary color: Close to 145C.

Seeds and fruits.—Seed and fruit development have not been observed on plants of the new *Dianthus*.

Disease & pest resistance: Plants of the new *Dianthus* have not been observed to be resistant to pathogens and pests common to *Dianthus* plants.

Garden performance: Plants of the new *Dianthus* have been observed to have good garden performance and to tolerate wind, rain and temperatures ranging from about 1° C. to 35° C.

It is claimed:

1. A new and distinct *Dianthus* plant named 'Shishika-01' as illustrated and described.

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