



US00PP17091P3

(12) **United States Plant Patent**  
**Ui et al.**

(10) **Patent No.:** **US PP17,091 P3**

(45) **Date of Patent:** **Sep. 12, 2006**

(54) **CALIBRACHOA PLANT NAMED**  
**'KAKEGAWA S81'**

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

(50) Latin Name: *Calibrachoa* sp.  
Varietal Denomination: **Kakegawa S81**

(52) **U.S. Cl.** ..... **Plt./263**

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(58) **Field of Classification Search** ..... **Plt./263**  
See application file for complete search history.

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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 164 days.

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(57) **ABSTRACT**

(21) Appl. No.: **11/052,126**

'Kakegawa S81' is a new *Calibrachoa* cultivar particularly  
distinguished by having a deep rose flower color, a white  
corolla throat color and a semi-creeping growth habit.

(22) Filed: **Feb. 7, 2005**

(65) **Prior Publication Data**

US 2006/0179528 P1 Aug. 10, 2006

**1 Drawing Sheet**

**1**

Genus and species: *Calibrachoa* sp.  
Variety denomination: 'Kakegawa S81'.

**BACKGROUND OF THE INVENTION**

The present invention comprises a new and distinct cul-  
tivar of *Calibrachoa*, botanically known as *Calibrachoa* sp.,  
and hereinafter referred to by the cultivar name 'Kakegawa  
S81'. It is characterized by having a rose flower color, a  
white corolla throat color and a semi-creeping growth habit.  
The new cultivar originated from a hybridization made in  
Kakegawa, Japan in 1998. A proprietary *Calibrachoa* breed-  
ing line with white flowers and a creeping growth habit  
(female) was crossed with a proprietary *Calibrachoa* breed-  
ing line with rose flower color and a semi-creeping growth  
habit (male).

In February 1999, F<sub>1</sub> seed from the above hybridization  
was sown in the greenhouse. Four single-plant selections  
were made based on their purple-pink flower color and  
semi-creeping growth habit and intercrossed to produce F<sub>2</sub>  
seed. In August 1999, F<sub>2</sub> seed was sown and 120 total plants  
were evaluated. One single-plant selection was made based  
on its deep rose flower color and semi-creeping growth habit  
and asexually propagated through rooted plant cuttings in  
both Kakegawa, Japan and Salinas, Calif. 'Kakegawa S81'  
has been shown to reproduce true to type in successive  
generations of asexual propagation.

**DESCRIPTION OF THE GENUS CALIBRACHOA**  
**LLAVE & LEX**

The genus *Petunia* was originally established in 1803 by  
A. L. Jussieu, who described both *P. parviflora* and *P.*  
*nyctaginiflora* as type species. Using a non-horticultural  
system that selected the first mentioned species as the type  
species (lectotype), N. L. Britton and H. A. Brown declared  
*P. parviflora* as the type species for *Petunia* in 1913.

**2**

During the 1980's and 1990, H. J. Wijsman published a  
series of articles regarding the ancestry of *P. hybrida*, the  
Garden *Petunia*, and the inter-relationship of several species  
classified as *Petunia*. These studies discovered that *P.*  
*hybrida* and its ancestral species, *P. nyctaginiflora* (= *P.*  
*axillaris*) and *P. violacea* (= *P. integrifolia*), possessed 14  
pairs of chromosomes while several other species, including  
*P. parviflora*, possessed 18 pairs of chromosomes. Since *P.*  
*parviflora* was the lectotype species for the *Petunia* genus,  
Wijsman and J. H. de Jong proposed transferring the 14  
chromosome species to the genus *Stimoryne*. Horticulturists  
opposed reclassifying the Garden *Petunia* and in 1986,  
Wijsman proposed the alternative of making *P. nyctaginiflora*  
the lectotype species for *Petunia* and transferring the 18  
chromosome species to another genus. The I. N. G. Com-  
mittee adopted this proposal. By 1990 Wijsman had trans-  
ferred several species, including *P. parviflora* (= *C.*  
*parviflora*) to *Calibrachoa*, originally established by Llave  
and Lexarza in 1825. *Calibrachoa parviflora* (= *C. mexicana*  
Llave & Lexarza) is now the type species for the genus  
*Calibrachoa*.

Classification of the current *Petunia* and *Calibrachoa*  
species is still in progress. New species are also being  
identified. Consequently a proper description has not been  
written for the *Calibrachoa* genus. *Calibrachoa* can,  
however, be distinguished from *Petunia* based on the higher  
chromosome number, chromosome morphology, plant  
branching habit and type of flower bud aestivation. Whereas  
*Petunia* species bear a flower peduncle and one new stem  
from a node, *Calibrachoa* bear a flower peduncle and three  
stems. *Petunia* species have a cochlear corolla bud, and a  
single outermost petal covers the other four, radially folded  
and terminally contorted petals. *Calibrachoa* flower buds  
are flat with all five petals linearly folded and the two lower  
petals forming a cover around the three other petals and  
fused together.

**DESCRIPTION OF PHOTOGRAPHS**

This new *Calibrachoa* plant is illustrated by the accom-  
panying photographs which show the plant's form, foliage

and flowers. The colors shown are as true as can be reasonably obtained by conventional photographic procedures.

FIG. 1. shows overall plant habit.

FIG. 2. shows the mature flower.

#### DESCRIPTION OF THE NEW CULTIVAR

The following detailed description sets forth the distinctive characteristics of 'Kakegawa S81'. The data which define these characteristics were collected from asexual reproductions carried out in Salinas, Calif. The detailed description was taken from plants grown under greenhouse conditions for approximately 4 months from transplanting of rooted cuttings. Color references are to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.), 4<sup>th</sup> Edition.

#### DETAILED BOTANICAL DESCRIPTION

##### Classification:

*Family*.—Solanaceae.

*Species*.—*Calibrachoa* sp. Cultivar 'Kakegawa S81'.

*Common name*.—*Calibra choa*.

##### Parentage:

*Male*.—Unnamed and unknown proprietary *Calibrachoa* breeding line.

*Female*.—Unnamed and unknown proprietary *Calibrachoa* breeding line.

##### Plant description:

*Life cycle*.—Tender Perennial.

*Form*.—Freely branching.

*Habit*.—Decumbent.

*Height*.—8 cm as measured from soil level to top of plant.

*Spread*.—50 cm.

##### Propagation:

*Type cuttings*.—Vegetative cuttings.

*Time to produce a rooted cutting*.—5–6 weeks.

*Time to bloom from propagation*.—10 weeks after root development.

Environmental conditions for plant growth: The terminal 1.0–1.5 inches of actively growing stems were excised and the base of each cutting dipped for one to two seconds in a 1:9 solution of DIP 'N GROW root inducing solution immediately prior to placing the cutting into a cell tray. The cell tray contained a moistened peat moss-based growing medium. The cuttings were misted with water from overhead for 10 seconds every 30 minutes until sufficient roots were formed. Rooted cuttings were transplanted and grown individually in 20 cm diameter plastic pots in a glass greenhouse located in Salinas, Calif. Pots contained a peat moss-based growing medium. Soluble fertilizer containing 20% nitrogen, 10% phosphorus and 20% potassium was applied once a day or every other day by overhead irrigation. Pots were top-dressed with a dry, slow-release fertilizer containing 20% nitrogen, 10% phosphorous and 18% potassium. The typical average air temperature was 24° C.

##### Stems:

*Stem color*.—RHS 143C (green).

*Anthocyanin color*.—77A (purple).

*Pubescence*.—Present.

*Pubescence color*.—RHS 155A (white).

*Stem description*.—Ancipital (round).

*Stem diameter*.—0.3 cm.

*Stem length*.—1.8–2.0 cm from soil line to first node.

*Internode length*.—2.0–3.0 cm.

##### Leaves:

*Leaf arrangement*.—Opposite.

*Leaf shape*.—Elliptical.

*Leaf apex*.—Mucronate.

*Leaf base*.—Decurrent.

*Leaf margin*.—Entire.

*Leaf surface*.—Rough, dull.

*Leaf surface pubescence*.—Slight.

*Pubescence color*.—RHS 155A (white).

*Venation*.—Pinnate.

*Leaf length*.—2.5–3.5 cm.

*Leaf width*.—0.6–0.9 cm.

*Leaf color*.—Upper surface: RHS 137B (green). Lower surface: RHS 138A (green).

*Petiole length*.—0.3–0.5 cm.

*Petiole color*.—RHS 144A (yellow-green).

##### Inflorescence:

*Flowering habit*.—Indeterminate.

*Flower type*.—Solitary.

*Flowering requirements*.—Will flower so long as day length is greater than 12 hours and temperature exceeds 13° C.

*Duration of flowers*.—About 5 days.

*Corolla shape*.—Flowers are funnel-shaped with five fused petals and five fissures dividing the petals and a shallow, yet prominent, indentation of the petal tip at the midvein.

*Fragrance*.—Absent.

##### Flower buds:

*Bud surface*.—Pubescent.

*Bud length*.—1.2–1.5 cm.

*Bud diameter*.—0.3–0.5 cm.

*Bud shape*.—Ovate.

*Bud color*.—RHS 4B (yellow) with RHS 77A (purple) stripes.

*Peduncle length*.—1.1–1.5 cm.

*Peduncle color*.—RHS 144B (yellow-green).

##### Flower description:

*Flower depth*.—2.3–2.7 cm.

*Flower tube length*.—1.2–1.5 cm.

*Flower tube diameter*.—0.5 cm.

*Flower diameter*.—2.5–3.5 cm.

*Calyx*.—5 sepals, free.

*Sepals*.—Shape: Lanceolate. Apex: Mucronate. Margin: Entire. Sepal color: Upper surface: 137A (green) at tip fading to RHS 141C (green) at base. Lower surface: 141B (green).

*Petal shape*.—Spatulate.

*Petal length*.—1.3 cm.

*Petal width*.—1.6 cm.

*Petal apex*.—Retuse (notched).

*Petal margin*.—Entire.

*Petal texture*.—Glabrous.

*Petal color*.—Lobe color: Upper surface: RHS 74A (red-purple) with RHS 77A (purple) midvein. Lower surface: RHS 81C (purple-violet) with a RHS 77A (purple) midvein. Corolla tube color: Inner: RHS 5B (yellow) with RHS 77A (purple) midvein and a RHS 155A (white) triangular patch between the petal throat and petal lobe. Outer: RHS 160C (gray-yellow) with RHS 77A (purple) veins.

##### Reproductive organs:

*Stamen number*.—5, free.

*Stamen color*.—RHS 144C (yellow-green).

*Pollen color*.—RHS 5B (yellow).

*Ovary*.—Superior.

*Pistil number.*—1 per inflorescence.  
*Pistil length.*—0.89 mm.  
*Stigma color.*—RHS 144A (yellow-green).  
*Style length.*—0.69 mm.  
*Style color.*—RHS 144A (yellow-green).

Disease and insect resistance: ‘Kakegawa S81’ has excellent resistance to rain, heat and drought, although it will not tolerate temperature below 10° C. ‘Kakegawa S81’ is susceptible to *Botrytis*, powdery mildew, various stem and root rots, and certain viruses, such as Tobacco Mosaic Virus and *Impatiens* Necrotic Spotted Virus. ‘Kakegawa S81’ is also susceptible to aphids, leafminers, whiteflies and various *Lepidoptera*.

Comparison with Known Cultivars

*Calibrachoa* ‘Kakegawa S81’ is a distinct variety of *Calibrachoa* due to its rose flower color and white corolla throat color. ‘Kakegawa S81’ is distinguished from known cultivars mainly by flower color as shown in Table 1 below.

TABLE 1

Characteristic	‘Kakegawa S81’	‘982-1’	‘K7-1158’
Flower color	Deep Rose	White	Rose

‘Kakegawa S81’ is most similar to the variety ‘Kakegawa S54’ (U.S. Plant Pat. No. 14,840); however, there are differences in flower petal color and corolla tube color as described in Table 2 below.

TABLE 2

Characteristic	‘Kakegawa S81’	‘Kakegawa S54’
Petal color, upper surface	RHS 74A (red-purple) with RHS 77A (purple) midvein	RHS 48C (red) with RHS 47A (red) midvein
Petal color, lower surface	RHS 81C (purple-violet) with RHS 77A (purple) midvein	RHS 50A (red)
Outer corolla tube color	RHS 160C (gray-yellow) with RHS 77A (purple) veins	RHS 6A (yellow)

We claim:

1. A new and distinct cultivar of *Calibrachoa* plant as shown and described herein.

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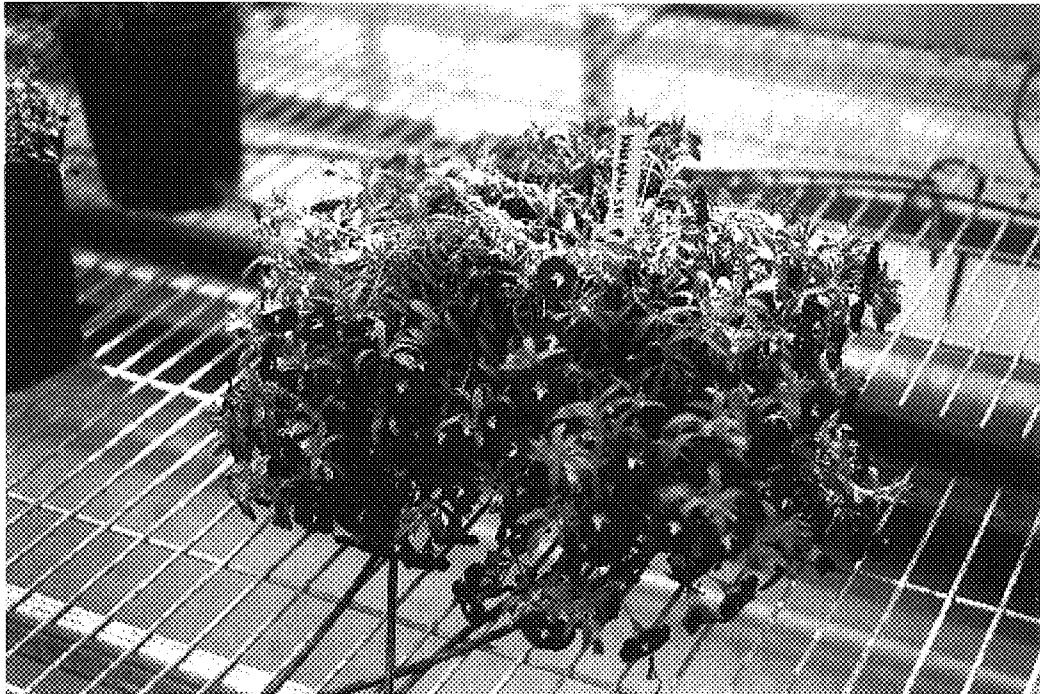


Fig. 1



Fig. 2