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Bessho

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(54) **CALIBRACHOA PLANT NAMED
‘KAKEGAWA S49’**

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

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(58) **Field of Search** **Plt./263**

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(57) **ABSTRACT**
‘Kakegawa S49’ is a new variety of *Calibrachoa*. This new
variety has light purple violet colored flowers and dark green
foliage.

1 Drawing Sheet

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BACKGROUND OF THE INVENTION

‘Kakegawa S49’ originated from a hybridization made in
spring 1996 in Kakegawa, Japan. The female parent was the
commercial variety ‘Liricashower Rose’ (U.S. Plant Pat. No.
9,884). The male parent was the commercial variety ‘Mil-
lion Bells Trailing White’ (U.S. Plant Pat. No. 10,278). Seed
from this cross was sown in spring 1997 and four F₁ plants
were selected. The four selections were intercrossed and the
resulting seed bulked together to produce F₂ seed. The F₂
seed was sown in summer 1997 and two plants were selected
for having sky blue flower color. The selections were
intercrossed and the resulting seed bulked together to pro-
duce F₃ seed. In spring 1998 the F₃ seed was sown and one
plant, designated as line K9-119, was selected. This line was
vegetatively propagated in Salinas, Calif. in summer 1998
and again in spring 1999. In these two vegetative genera-
tions the line was evaluated and determined that the traits are
firmly fixed and stable. No inherent variation or off-types
have been identified.

**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.*
nyctaginifloa 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.

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

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opposed reclassifying the Garden *Petunia* and in 1986,
Wijsman proposed the alternative of making *P. nyctagini-
flora* 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, 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.

**ENVIRONMENTAL CONDITIONS FOR PLANT
GROWTH**

The terminal 1.0 to 1.5 inches of an actively growing stem
was excised. The base of the cuttings were dipped for 1 to
2 seconds in a 1:9 solution of Dip ‘N Grow (1 part solution
to 9 parts water) root inducing solution immediately prior to
sticking into the cell trays. Cuttings were put into plastic cell
trays having 98 cells, and containing a peat moss-based
growing medium. The cuttings were misted with water from
overhead for 10 seconds every 30 minutes until sufficient
roots were formed. The vegetative cuttings were propagated
in five to six weeks.

Rooted cuttings were transplanted and grown 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% phosphorus and 18% potassium. The typical average air temperature was 24C.

DETAILED DESCRIPTION OF THE NEW PLANT

The following traits and characteristics describe the new variety. The observed plants were 3 moths old from a rooted cutting.

Classification:
Family.—Solanaceae.
Species.—Calibrachoa spp.
Common names.—Petunia.
Parentage: ‘Kakegawa S49’ is a third generation selection from mass selection and intercrossing of progeny from the hybridization of ‘Liricashower Rose’ (U.S. Plant Pat. No. 9,884) and the variety ‘Million Bells Trailing White’ (U.S. Plant Pat. No. 10,278).
Growth:
Habit.—Decumbent, mounding in center.
Height.—23.0 cm.
Spread.—115.0 cm when grown in a 41 cm hanging basket or pot, and using five 20 cm potted plants in one hanging basket.
Life cycle.—Annual.
Time to produce a rooted cutting.—3 weeks.
Time to bloom from propagation.—10 weeks.
Form.—Branching, dense.
Stems:
Stem color.—R.H.S. 144B (yellow - green).
Anthocyanin color.—R.H.S. N77A (purple).
Pubescence.—Slightly.
Pubescence color.—R.H.S. 155D (white).
Pubescence shape.—Pointed.
Stem description.—Round, ancipital.
Stem diameter.—2.0 mm.
Internode length.—1.5 to 2.5 cm.
Leaves:
Leaf tip.—Mucronate.
Leaf arrangement.—Alternate.
Leaf base.—Decurrent.
Leaf color.—Upper surface: R.H.S. 137A (green); lower surface: R.H.S. 138B (green).
Leaf frangrance.—Absent.
Leaf margin.—Entire.
Leaf surface.—Slightly.
Petiole color.—R.H.S. 138C (green).
Petiole length.—2.0 to 3.0 mm.
Leaf length.—3.0 to 3.5 cm.
Leaf shape.—Elliptical.
Leaf width.—1.0 cm at full expansion.
Flowers:
Calyx.—5 sepals; 1.0×3.0 cm (l×w); free.
Corolla.—5 petals, fused.
Flower diameter.—3.0 cm.
Bud color.—R.H.S. N144D (yellow-green).
Bud shape.—Ovate.
Bud surface.—Pubescent.
Duration of flower life.—5 days.

Flowering habit.—Indeterminate.
Ovary.—Superior.
Placenta arrangement.—Central.
Peduncle.—2.5 cm length; 1.0 mm diameter; slightly smooth, short pubescence.
Inflorescence type.—Solitary.
Stamens.—5 stamens, three short and two long, free.
Stamens color.—R.H.S. 144D (yellow-green).
Stigma color.—R.H.S. 134A (green).
Style color.—R.H.S. 144D (yellow-green).
Petal size.—2.5×1.5 cm (l×w).
Petal color.—Upper surface: R.H.S. N82B (purple-violet); lower surface: R.H.S. 84D (violet); corolla throat: R.H.S. 155D (white) with R.H.S. N77A (purple) veins; corolla tube: inner surface: R.H.S. 4C (yellow); outer surface: R.H.S. 4C (yellow).
Petal pubescence.—Glabrous.
Pollen color.—R.H.S. 1A (green-yellow).
Produces seed.—No.

COMPARISON WITH MOST SIMILAR VARIETY

‘Kakegawa S49’ is most similar to the variety ‘Colorburst Violet’ (U.S. Plant Pat. No. 12,086). ‘Kakegawa S49’ differs from ‘Colorburst Violet’ in that it has a lighter purple-violet flower color, a pale yellow corolla throat and a more prostrate, trailing plant habit. Shown below in Table one are comparisons with the parental cultivar.

TABLE 1

Parents	Liricashower Rose & Million Bells Trailing White
Plant Habit	Female and male decumbent; S49 decumbent and mounding in center
Flower Color	Female purplish rose: male white: S49 light violet
Flower Size (diameter)	Female and S49 are 2.5–3.0 cm: male 2.6–2.8 cm
Stem Pubescence	Female and S49 slight: male is moderate
Stem Thickness	Female 1.0–1.5 mm (laterals); male 1.2 mm: S49 2.0 mm
Leaf Color (upper)	Female grayish green (RHS 137B): male deep yellow green (RHS 146A): S49 grayish green (RHS 137A)
Leaf Pubescence	Female, male and S49 is slight
Leaf Shape	Female slightly oblanceolate: male is lanceolate: S49 is elliptical

PLANT DISEASE AND PEST RESISTANCE

Excellent resistance to rain, heat and drought. Will not tolerate temperatures below 10C. Plants are susceptible to Botrytis, powdery mildew, various stem and root rots, and certain viruses, like Tobacco Mosaic Virus and Impatiens Necrotic Spotted Virus. Plants can be infested with aphids, leafminer, whitefly and various Lepitoptera.

What is claimed is:

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

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FIG. 1



FIG. 2