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Madsen

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(54) ***CAMPANULA* PLANT NAMED 'PKMP09'**

(50) Latin Name: ***Campanula portenschlagiana***
Varietal Denomination: **PKMP09**

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(73) Assignee: **Gartneriet PKM A/S**, Odense N (DK)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.**
A01H 5/00 (2006.01)
(52) **U.S. Cl.** **Plt./414**
(58) **Field of Classification Search** Plt./414
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Campanula* plant named 'PKMP09', characterized by having compact, upright plant habit; vigorous growth habit and less need for chemical growth retardation; large and dark violet flowers with wide and long petals, and no need for vernalization.

10 Drawing Sheets

Latin name of the genus and species of the plant claimed: *Campanula portenschlagiana.*

Variety denomination: 'PKMP09'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Campanula* plant, botanically known as *Campanula portenschlagiana* Schult., commonly known as Dalmatian Bellflower, and hereinafter referred to by the name 'PKMP09'.

The new *Campanula*, 'PKMP09', is a product of a planned breeding program conducted by the inventor, Christian Hald MADSEN, in Søhus, Denmark. The objective of the breeding program is to develop a new *Campanula* variety with uniform and compact plant form and deep purple flowers.

The new *Campanula* cultivar originated from a cross made in June 2007 by the Inventor between a code-named proprietary selection of *Campanula* Schult 08.03 as the female parent and a code-named proprietary selection of *Campanula* Schult 08.05 as the male parent. The inventor selected the new *Campanula* 'PKMP09' in August 2008 on the basis of it having dark violet-colored flowers.

Asexual reproduction of the new *Campanula* 'PKMP09' by terminal cuttings since February 2009 in Søhus, Denmark, has shown that the combination of characteristics as herein disclosed for the new cultivar are firmly fixed and retained through successive generations of asexual reproduction. The new cultivar reproduces true-to-type.

SUMMARY OF THE INVENTION

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'PKMP09'. These characteristics in combination distinguish 'PKMP09' as a new and distinct cultivar:

1. Upright plant habit with short upright stems;
2. Vigorous growth habit, and less need for chemical growth retardation;
3. More uniform and deeper purple flower color;
4. No need for vernalization;
5. Large and dark violet flowers with wide and long petals; and

6. Large leaves, with a few basic leaves appearing in the upper center of the plant.

Side-by-side comparisons between the new *Campanula* 'PKMP09' and the cultivar *Campanula* 'PKMP05' (patented, U.S. Plant Pat. No. 17,188), were conducted by the inventor in Stige, Denmark. Plants of 'PKMP09' differ from the plants of 'PKMP05' in the following characteristics:

1. Plants of 'PKMP09' are shorter and have shorter stems than plants of 'PKMP05';
2. Plants of 'PKMP09' have darker violet-colored flowers and bud flowers than plants of 'PKMP05'
3. Plants of 'PKMP09' have wider and longer petals than plants of 'PKMP05'.
4. Plants of 'PKMP09' have larger leaves than plants of 'PKMP05'.

Of the many commercial cultivars known to the inventor, the most similar in comparison to 'PKMP09' is the cultivar *Campanula* 'PKMP05' (patented, U.S. Plant Pat. No. 17,188), as described above.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar 'PKMP09', showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description, which more accurately describe the actual colors of 'PKMP09'.

FIG. **1** shows a side perspective view of a typical flowering plant of 'PKMP09' as grown in a 11 cm pot.

FIG. **2** shows a top perspective of 'PKMP09'.

FIG. **3** shows a close-up view of a typical 'PKMP09' flower bud.

FIG. **4** shows a close-up view of a typical 'PKMP09' flower.

FIG. **5** shows a close-up view of a typical 'PKMP09' leaf.

FIG. **6** shows a comparison view of a typical 'PKMP05' plant (on left) and 'PKMP09' plant (on right).

FIG. **7** shows a comparison view of a typical young flower of 'PKMP09' (on right) compared to a typical young flower of 'PKMP05' (on left).

FIG. **8** shows a comparison view of a typical fully-opened flower of 'PKMP09' (on right) compared to a typical fully-opened flower of 'PKMP05' (on left).

FIG. **9** shows a comparison view of a typical leaf of 'PKMP09' (on right) compared to a mature leaf of 'PKMP05' (on left).

FIG. **10** shows a comparison view of a typical raceme from 'PKMP05' (on left) to 'PKMP09' (on right).

DETAILED BOTANICAL DESCRIPTION

The new *Campanula* 'PKMP09' has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary significantly with variations in environment such as temperature, light intensity, day length, and fertility level without any variance in genotype.

The aforementioned photographs, together with the following observations, measurements and values describe plants of the new *Campanula* 'PKMP09' as grown in a heated and lighted, glass-covered greenhouse in Søhus, Denmark, under conditions which are generally used in commercial practice. Plants of 'PKMP09' are grown in a glass-covered greenhouse where day temperatures in the greenhouse range from 18-22° C. and the average night temperatures is 16° C. Light levels used while growing plants of 'PKMP09' are 100 Wm^2. Plants of 'PKMP09' are grown with 16 to 18 hour long day photoperiodic treatments; 10 hour short day photoperiodic treatments for propagation and seedlings. No growth retardants were used when growing plants of the new *Campanula* 'PKMP09'.

The age of the 'PKMP09' plants described is 14 weeks old after cutting, as grown in 10.5 cm pots. The photographs and descriptions were taken during the winter season when day temperatures in the glass-covered greenhouse ranged from 18-22° C. and when the night average temperature in the glass-covered greenhouse was 16° C.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), 4^{th} edition, except where general colors of ordinary significance are used.

Classification:

Botanical.—*Campanula portenschlagiana* Schult.

Parentage: *Campanula portenschlagiana* Schult. Female: 08.03; Male: 08.05.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots.—About 10 to 14 days at 18 to 21° C. in tunnels in a greenhouse.

Root description.—Fine, well branched.

Plant:

Form.—Perennial, herbaceous, rosette plant with upright plant habit and overall globular shape. Campanulate flowers in racemes. Freely branching with lateral branches forming at every node; dense and bushy.

Crop time.—After rooting, about 14 weeks are required to produce finished flowering plants in 11 cm pots.

Vigor.—Vigorous.

Size.—Height (soil level to top of plant plane): About 8-9 cm. Spread (width): About 27 cm.

Stem.—Shape: Round. Strength: Stiff. Color: RHS 144A, yellow-green.

Lateral branches.—Quantity: About 65-75 per plant. Length (including flowers): About 10 cm. Diameter: About 1 mm to 2 mm. Aspect: Center of plant: ascending; Perimeter of plant: spreading to drooping. Texture: Hispidolous and white lactate. Color: RHS 144A, yellow-green. Basal branching: Yes, when flowering. Internode Length: About 30 mm.

Foliage:

Quantity of leaves per lateral branch.—About 5.

Arrangement.—Single, alternate.

Length.—Basal: About 20 mm to 25 mm; Apical: About 10 mm.

Width.—Basal: About 30 mm to 35 mm; Apical: About 8 mm to 10 mm.

Shape.—Cordate, dentate.

Apex.—Rounded.

Base.—Cordate.

Margin.—Broadly dentate.

Texture.—Smooth, glabrous, dull.

Color.—Upper surfaces (young and mature foliage) RHS N137A, green; Under surfaces (young and mature foliage): RHS 137A, green.

Venation.—Color: (Upper surfaces N137A and under surfaces 137A).

Petiole.—Length: Basal: About 6 cm to 7 cm. Apical: Up to 1 cm. Diameter: (please provide measurement) 1-2 mm. Texture: Smooth, glabrous. Color: RHS N137A, green.

Inflorescence:

Flower arrangement and shape.—Single, upright flowers in racemes; acropetal, campanulate flowers with small star shaped calyx.

Natural flowering season.—Continuous throughout the spring and summer. Season can be extended by long day treatments, no vernalization needed.

Flower longevity on the plant.—About 5-9 days; however, longevity of individual flowers is highly dependent on temperature and light conditions. Flowers persistent.

Fragrance.—None.

Inflorescence size.—Length: About 8 cm. Diameter: About 6 cm.

Quantity of flower buds and flowers per plant.—About 1000.

Quantity of flower buds per lateral stem.—About 8-10.

Quantity of flowers per lateral stem.—About 6-8.

Flowers.—Depth: About 25-27 mm. Diameter: About 25-30 mm. Shape: Lanceolate, with acuminate lobes (about 12-14 mm long and 8 mm wide. Aspect: Upward to outward. Corolla color: RHS N87A, violet, and the bottom of the bell has this same violet color.

Buds.—Length: Up to 15 mm. Diameter: Up to 5 mm. Shape: Oblong, ridged. Color: RHS 144D, green to RHS N88A, violet.

Petals.—Arrangement: Single, sympetalous. Quantity per flower: 5. Overall shape: Bell-shaped, campanulate. Apex: Acute. Base: Fused. Length: About 12 mm to 14 mm. Width: About 8 mm. Margin: Entire. Texture: Velvety. Color (when opening): Upper surface: RHS N87A, violet. Under surface RHS N87A, purple-violet. Color (when fully opened): Upper surface: RHS N87A, violet; Under surface RHS N87A, violet. Fading: None, but withers to RHS 93A.

Sepals.—Arrangement: Free. Quantity per flower: 5. Overall shape: Arrow-shaped. Apex: Cuspidate. Base: Fused. Length: About 5-6 mm. Width: About 1 mm. Margin: Entire. Texture: Shiny, glabrous. Color:

(immature — both surfaces): RHS 138A, green. Color: (mature — both surfaces): RHS 138A, green.

Peduncle.—Strength: Moderately strong. Length: About 15-27 mm. Diameter: About 1 mm. Color: RHS 144 A, yellow-green.

Reproductive organs:

Androecium.—Stamen: Quantity per flower: 5; fused until pollen has been shed. Anther: Shape: Fused, after shedding curling. Length: About 1 mm. Color: RHS 158B, yellow-white. Pollen: None.

Gynoecium.—Pistil: Quantity per flower: 1. Length: About 10 mm. Stigma: Shape: Tripartite. Color: RHS 85A, violet. Style: Length: About 9 mm. Color: RHS 85A, violet. Ovary: Color: RHS 1C, green-yellow.

Seeds: None observed.

Fruit: None observed.

Growth retardants: No growth retardants were used in the breeding program.

Weather tolerance: Plants of the new *Campanula* have exhibited good tolerance to drought, rain and wind, with low temperature resistance to −15° C. or −20° C.

Disease/pest resistance: None observed.

What is claimed is:

1. A new and distinct cultivar of *Campanula* plant named 'PKMP09', as illustrated and described herein.

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FIG. 1

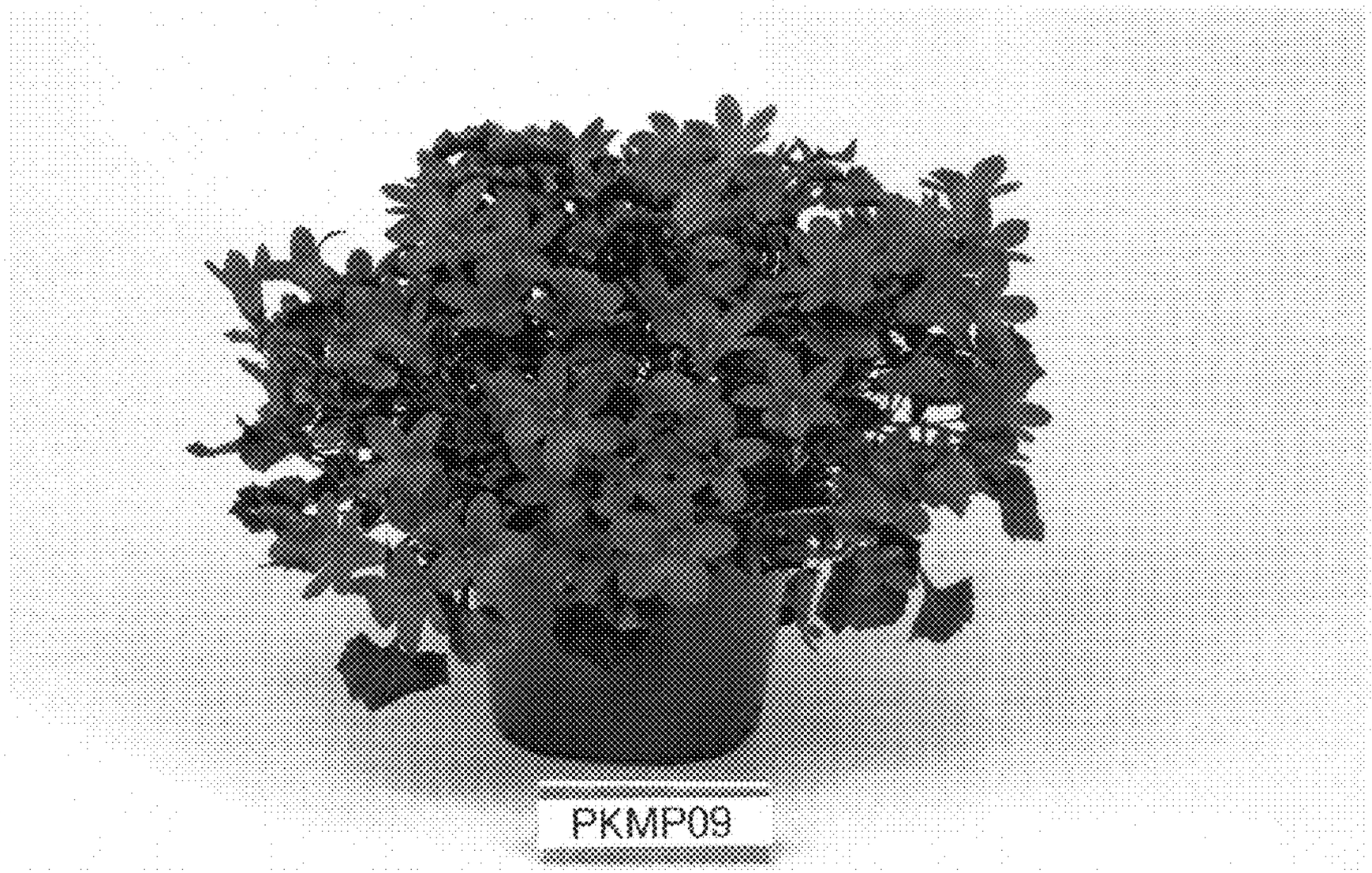

FIG. 2

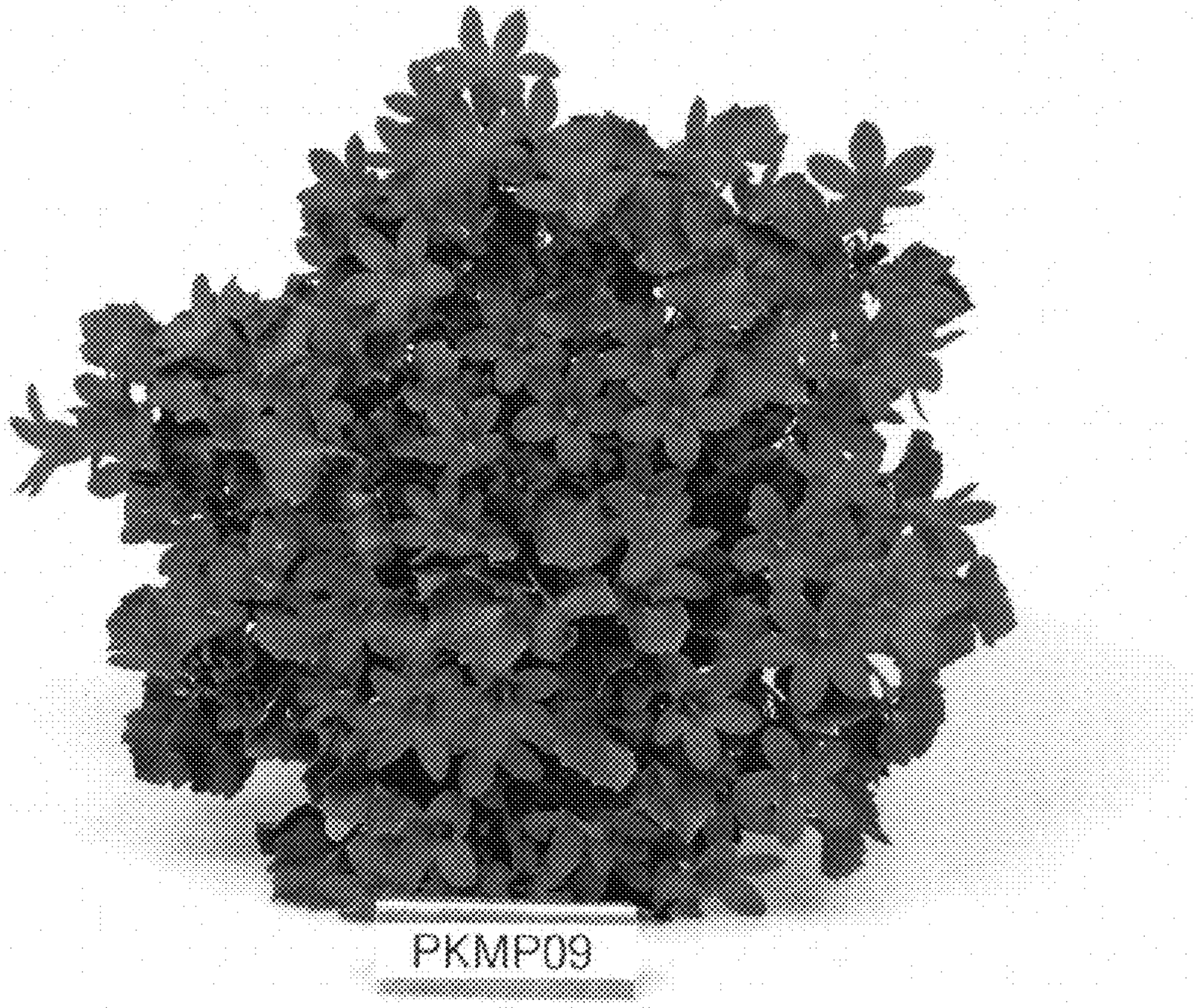

FIG. 3

FIG. 4

FIG. 5

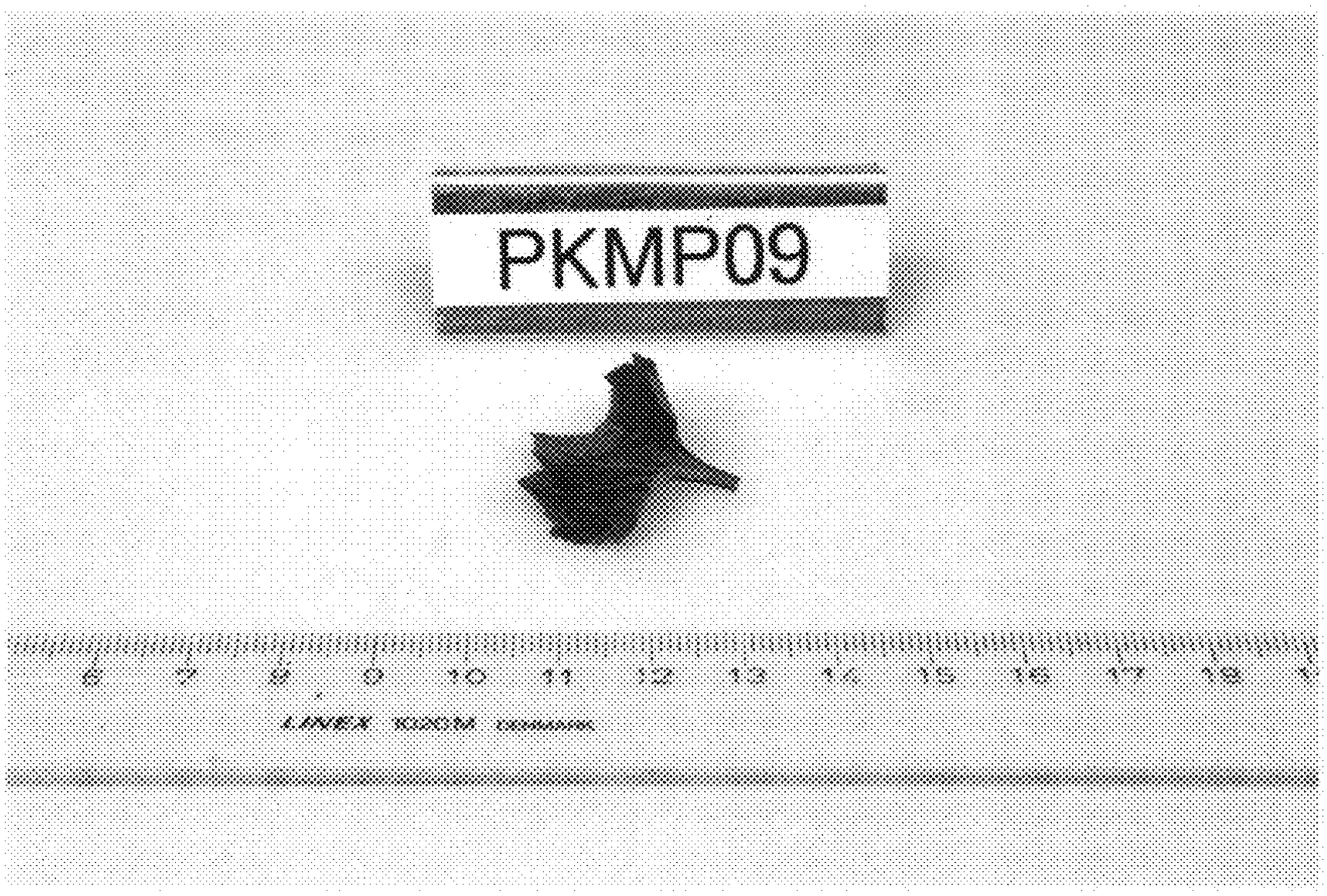

FIG. 6

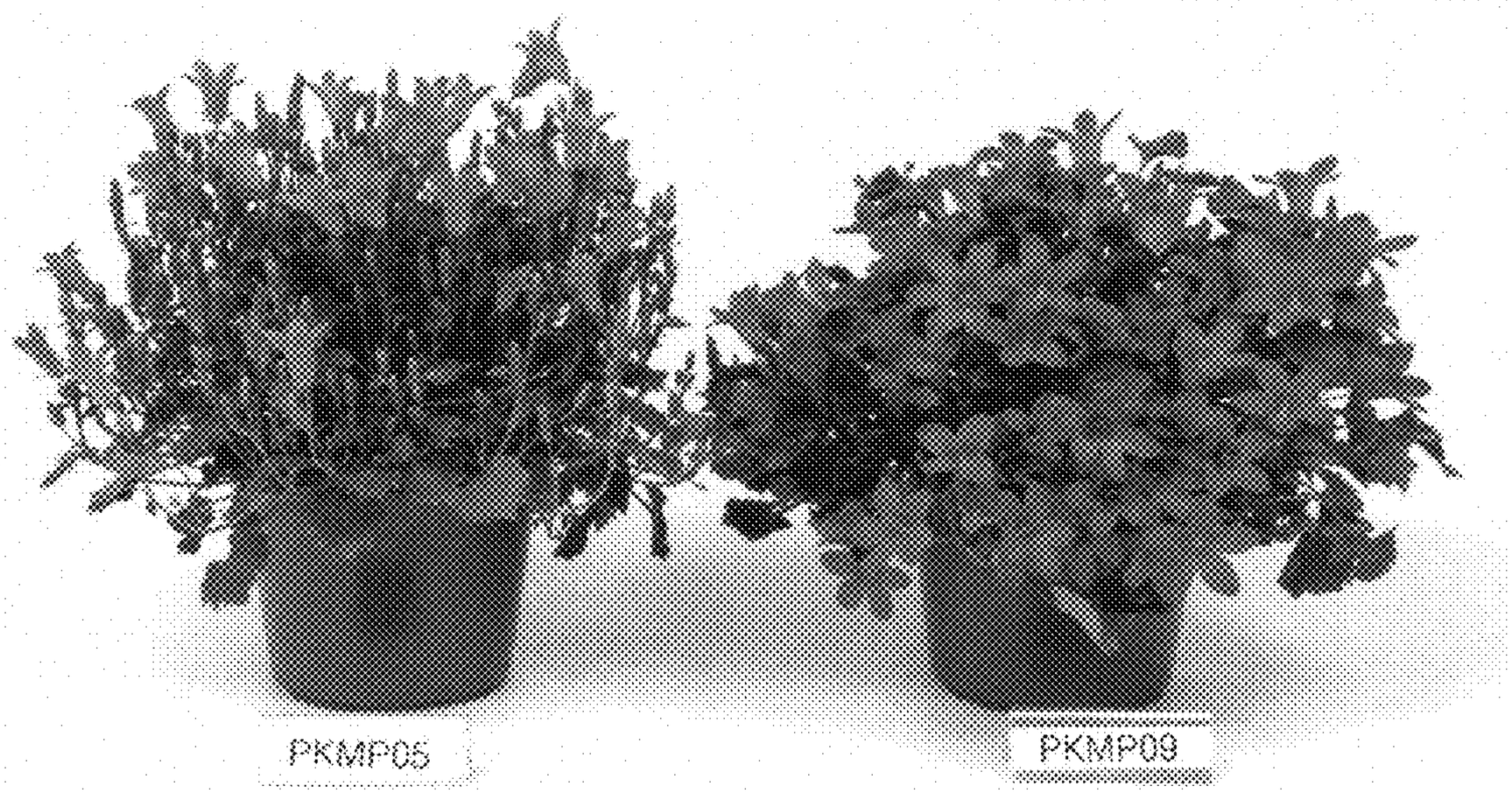

FIG. 7

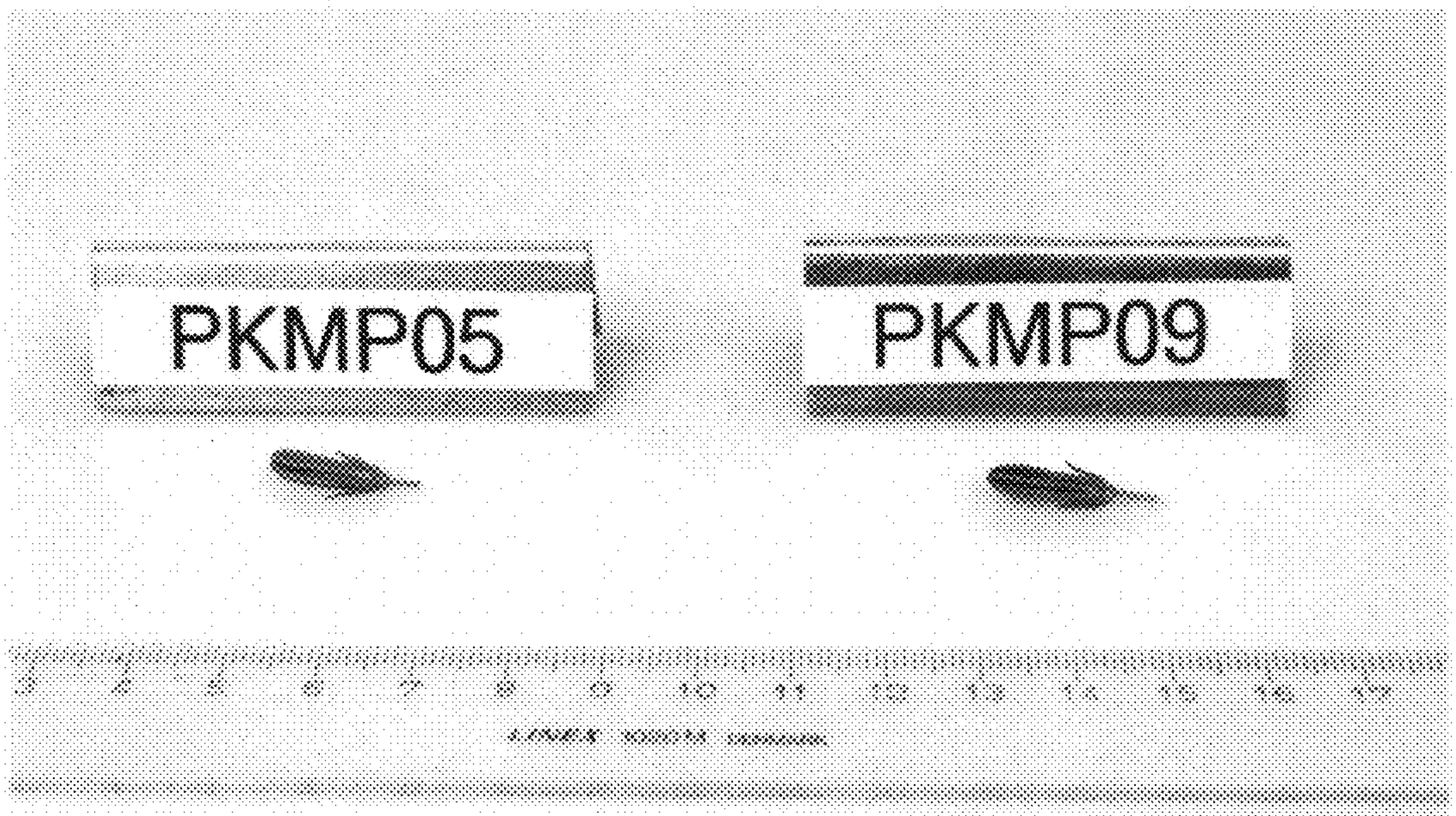

FIG. 8

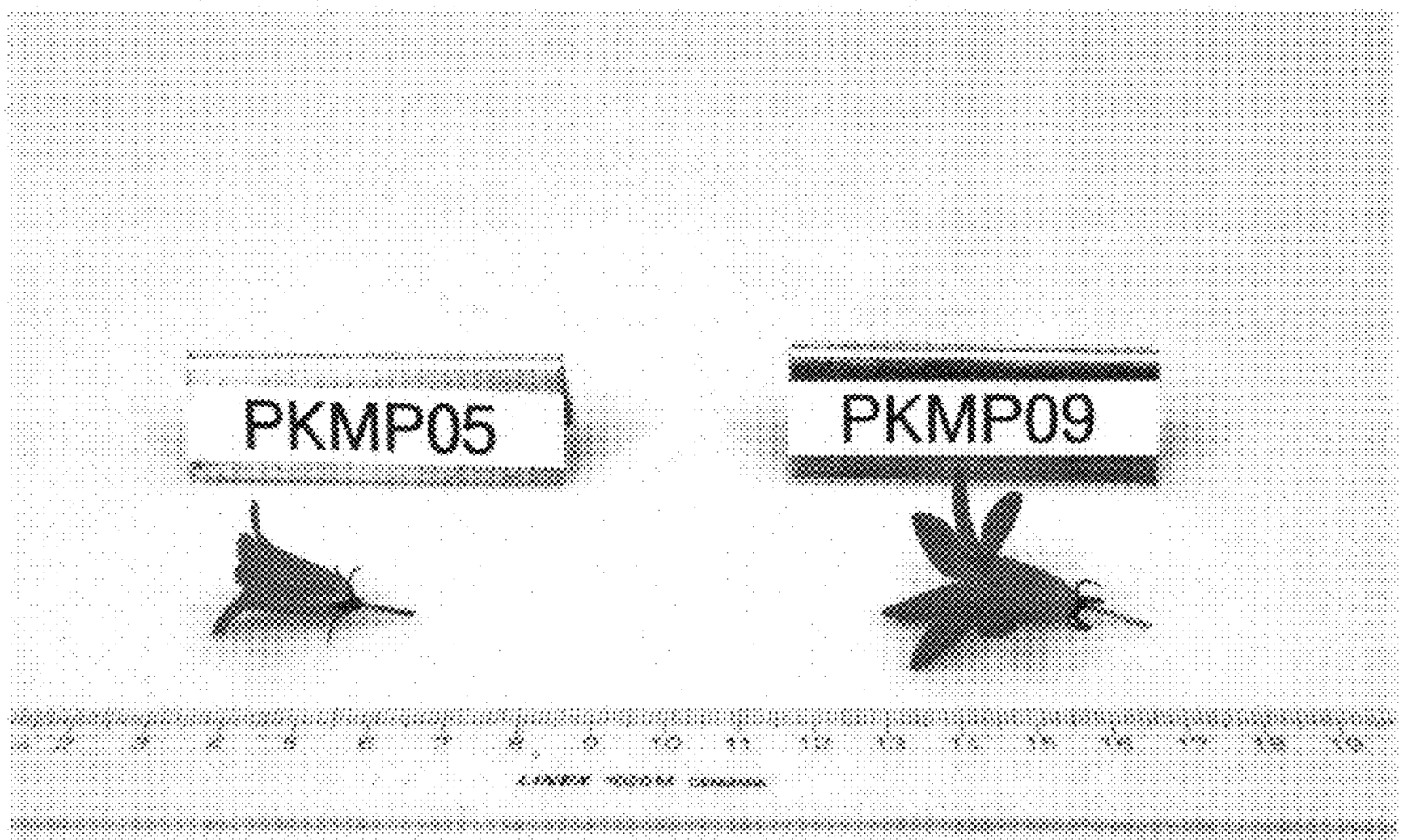

FIG. 9

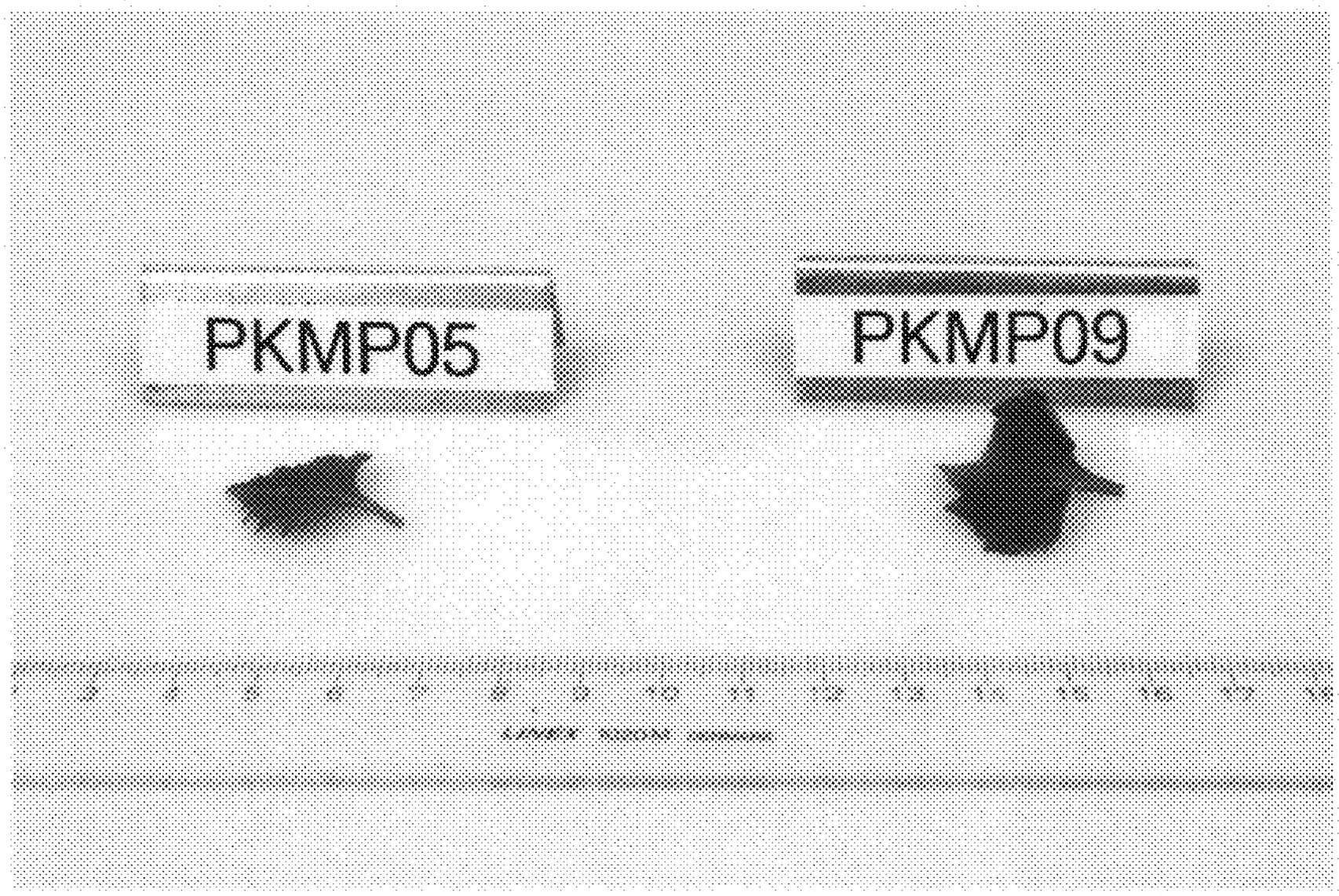

FIG. 10