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[54]	KALANCHOE PLANT NAMED COZUMEL	
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#### [57] **ABSTRACT**

A new and distinct Kalanchoe plant named Cozumel, characterized by its orange flower color with bright yellow eye, compact habit, free branching, average 11-week flowering response, and its adaptability to production in 10-15 cm. pots.

# 1 Drawing Figure

The present invention relates to a new and distinctive cultivar of Kalanchoe plant, botanically known as Kalanchoe, and referred to by the cultivar name Cozumel.

The new cultivar was referred to during the selection process by the designation Tetravulcan-3-4-1-1-4-1-1, 5 and is a product of a planned breeding program. Cozumel was later recoded K78-44N when received by Pan American Plant Company, West Chicago, Ill. in 1978. The basic objective of the breeding program was to create a new Kalanchoe cultivar having orange flower with a yellow eye, compact habit and the ability to produce commercially acceptable quality in a yearround Kalanchoe program.

The new cultivar was originated from a self-pollination of Tetravulcan-34-1-1-4-1, made in a controlled breeding program at Linda Vist, S.A., Cartago, Costa Rica.

Cozumel was discovered and selected by me as a flowering plant within the progeny of the stated self in 20 a field of seedlings in Cartago, Costa Rica. Asexual reproduction of the new cultivar by stem cuttings, as performed by me at West Chicago, Ill. and Parrish, Fla., has demonstrated that the combination of characteristics as herein disclosed for the new cultivar are firmly 25 fixed and are retained through successive generations of asexual reproduction.

Cozumel has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in environment such as 30 temperature, light intensity and day length. The following observations, measurements and values describe the new cultivar as grown in Parrish, Fla., under greenhouse coonditions which closely approximate those generally used in commercial practice.

The following traits have been repeatedly observed and are determined to be basic characteristics of Cozumel, which in combination distinguish this Kalanchoe as a new and distinct cultivar:

- (1) Outstanding orange flower petal color with a yellow eye.
- (2) Compact habit, average growth rate as compared to other cultivars.
- (3) Freely branching, with shoots formed at every 45 node.
- (4) Suitable for production in 10 to 15 cm. pots, flowering from 10 weeks in spring, 11 weeks in fall and summer and 12 weeks in winter.

- (5) Highly floriferous, with numerous flowers formed at every shoot.
- (6) To reduce peduncle elongation after flower initiation, plants can be treated with B-9.

The new cultivar is most similar to Cancun, a cultivar of the present inventor disclosed in an application filed concurrently.

Cozumel is principally distinguished from Cancun by its brighter orange flower color, larger yellow eye, and slightly larger flower size. In addition, the large leaves of Cozumel tend to cup up toward the adaxial side of the leaf where the edges of the large leaves of Cancun tend to cup down.

The accompanying photographic drawing shows a typical specimen plant of the new cultivar. The colors appearing in the photograph are as true as possible with color illustrations of this type.

In the following description, color references are made to The Royal Horticultural Society Color Chart (R.H.S.) except where general colors of ordinary significance are referred to. Color values were taken under natural light conditions of approximately 2000 foot candles at approximately 3:15 P.M. in Parrish, Fla.

# BOTANICAL CLASSIFICATION

Kalanchoe, cv. Cozummel Parentage Self-pollination of Tretravulcan-3-4-1-1-4-1.

# PROPAGATION

The new cultivar holds its distinguishing characteristics through successive propagations by leaf cuttings and by division of shoots.

Type cutting: Tip cutting, with stems up to 2 cm. long. Time to root: 10 Days at 21° C. summer and 14 days at 21° C. winter.

Rooting habit: Fibrous, many very fine roots.

# PLANT DESCRIPTION

Form: Upright, medium height, compact, growing and scheduling practices can produce small plants in 10 cm. pots or larger plants in 15 cm. pots.

Habit of growth: Average to fast growth rate for this type of plant. Generally shoots formed at every node. Foliage description: Leaves simple, opposite, generally symmetrical.

1. Size.—Average full grown leaf of a flowering plant in a 10 cm. pot is 70-90 mm. long and 40-55

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mm. wide. Plants in larger pots have proportionately larger leaves.

- 2. Shape.—Ovate, apex obtuse, base trincate to acute.
- 3. Texture.—Glabrous, coriaceous, succulent.
- 4. Margin.—Crenate to sinuate.
- 5. Color.—Young foliage top side, 147A, under side, 147B. Mature foliage top side 147A, under side 147B.

#### FLOWERING DESCRIPTION

Flowering habit: Inflorescence of each shoot is formed by dichotomous branching, starting with opening of terminal flower of main axis followed by terminal flowers of the side branches of the inflorescence. 15 Opening of new buds will continue for 2 months or more. Individual flowers last 2 weeks or more after opening.

Natural flowering season: January. Flowering time under controlled day length at 30° C. in summer is 11 20 weeks; in winter at 20° C., 12 weeks. Flowering time depends on temperature, light intensity and other growing conditions.

Flower buds: Oblong, developing to tubular as petals mature, sheathed with four green sepals; Corolla at 25 maturity about 11 mm. long.

- 1. Size.—12 mm. long.
- 2. Shape.—Oblong.

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3. Rate of opening.—Normal.

Flowers borne: Compound dichasial cyme on strong 30 10-15 cm. pots. peduncles. Peduncle length depends on growing con-

ditions and B-9 applications; pedicles up to 5 mm. long.

Quantity of flowers: Very floriferous with new buds continuing to develop.

# <sup>5</sup> Petals:

- 1. Shape.—Nearly round, apex cuspidate.
- 2. Color.—Top side when opening, 32A, fading to 32C; under side, 24D.
- 3. Number and size of petals.—Four, united in corolla, petals 4–5 mm. in diameter; total flower diameter 12–13 mm.

# Reproductive organs:

- 1. Stamens.—8 In number. (a) Anther shape: Flat, elliptical. (b) Filament color: Yellow. (c) Pollen color: Yellow.
- 2. Pistels.—(a) Stigma shape: Flat, crystalline. (b) Style color: Greenish-white. (c) Ovaries: 4 celled, 5 mm. long, green.

#### DISEASE RESISTANCE

No known Kalanchoe diseases observed to date.

### I claim:

1. A new and distinct Kalanchoe plant named Cozumel, as described and illustrated, and particularly characterized by its orange flower color with bright yellow eye, compact habit, free branching, average 11-week flowering response, and its adaptability to production in 10-15 cm. pots.

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