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PURPLE VERBENA PLANT

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ATTORNEYS

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## PURPLE VERBENA PLANT

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Boyce Thompson Institute for Plant Research, Inc.,  
Yonkers, N. Y., a corporation of New York

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1 Claim. (Cl. 47—60)

This invention provides a new and distinct variety of purple verbena plant. The new variety of plant is particularly characterized by its unique purple flowers which are exceptionally large forming large clusters of many flowers which are borne on long stiff stems, by large dark green leaves, by erect habit, and by good vigor. The new variety has been produced asexually from cuttings and the characteristics appear to be fixed.

The distinct variety of purple verbena was produced by selecting a purple flowered plant growing in a bed of mixed verbena seedlings and propagating it vegetatively. Growing tips of the branches of this selected seedling were treated with colchicine. The tips which were affected by the colchicine were removed and rooted in sand. The resulting plants produced no seed to fully controlled self or close pollinations. In the greenhouse a few seeds were obtained to open pollination. These seeds were planted and the seedlings produced were vigorous. Chromosome studies reveal that this selected plant so produced is a triploid with  $2n=15$  chromosomes. This Triploid Purple was no doubt produced from a tetraploid seed parent with  $2n=20$  chromosomes, crossed with a diploid with  $2n=10$  chromosomes. This diploid was the same plant from which the tetraploid seed parent was produced.

The new variety of plants as thus originated were asexually reproduced from cuttings at Boyce Thompson Institute for Plant Research, Inc., Yonkers, New York.

In the accompanying drawing a plant of the invention is illustrated by a painting of a mature plant in substantially full bloom.

### Flowers

The individual flowers are about one inch in diameter

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and according to Ridgway are between prune purple and fluorite purple. The nearest color according to Munsell is P 3/8 (purple hue, 3 value, and 8 chroma). The freshly opened flowers have a marked white eye which extends from the center of the corolla to the point of union of the petals which produces a star-like appearance. The white area disappears in older flowers which are uniformly purple. The flower clusters are relatively large being about  $2\frac{1}{2}$  inches in diameter and  $2\frac{1}{4}$  inches long in the flower axis, and generally consist of from 40 to 50 flowers. The clusters are borne on stiff, upright stems about 14 inches long, about  $\frac{1}{8}$  inch in diameter, and the clusters are usually about 12 inches above the ground.

### Leaves

The leaves are dark green, thick, about 2 inches in diameter, and  $2\frac{3}{4}$  inches in length near the base while the leaves at the tips of the branches are smaller, and they do not burn in the field during the summer months.

### Seeds

This variety of plant has produced no seed to controlled self-pollinations and is propagated only by means of vegetative cuttings. The pollen is about 47% aborted and the grains are from 47 to 76 microns in diameter.

### General

This new plant is more vigorous and robust than the old variety of Spectrum Red verbena. To many people the plant has noticeable but slight fragrance. The plant remains in good vegetative condition throughout the summer and the leaves remain green and do not burn during the summer. The plant flowers well and has a profusion of bloom throughout the summer and until killed by frost.

### I claim:

The new and distinct variety of purple verbena plant substantially as illustrated and described, characterized by large individual flowers which are uniformly purple in large clusters of many flowers borne on stiff, erect and long stems, by large deep green leaves, and by good vigor.

No references cited.