

2-1995

## ‘Starfire’ Cuphea Hybrid

A. E. Thompson

*United States Department of Agriculture*

W. W. Roath

*United States Department of Agriculture*

Mark P. Widrlechner

*United States Department of Agriculture, isumw@iastate.edu*

Follow this and additional works at: [http://lib.dr.iastate.edu/ncrpis\\_pubs](http://lib.dr.iastate.edu/ncrpis_pubs)

 Part of the [Agricultural Science Commons](#), [Agriculture Commons](#), [Agronomy and Crop Sciences Commons](#), and the [Horticulture Commons](#)

The complete bibliographic information for this item can be found at [http://lib.dr.iastate.edu/ncrpis\\_pubs/9](http://lib.dr.iastate.edu/ncrpis_pubs/9). For information on how to cite this item, please visit <http://lib.dr.iastate.edu/howtocite.html>.

---

This Article is brought to you for free and open access by the North Central Regional Plant Introduction Station at Iowa State University Digital Repository. It has been accepted for inclusion in NCRPIS Publications and Papers by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).

---

# 'Starfire' Cuphea Hybrid

## **Abstract**

'Starfire' is a sterile hybrid of *Cuphea ignea* A. DC. x *C. angustifolia* Jacq. ex Koehne and is intended as a pot plant for greenhouse or home (Fig. 1). 'Starfire' is the first reported hybrid between these two species (Thompson et al., 1989) and has unique flower and foliage characteristics.

## **Keywords**

Cuphea, pot plant

## **Disciplines**

Agricultural Science | Agriculture | Agronomy and Crop Sciences | Horticulture | Plant Sciences

## **Comments**

This article is from *HortScience* 30, no. 1 (February 1995): 166–167.

## **Rights**

Works produced by employees of the U.S. Government as part of their official duties are not copyrighted within the U.S. The content of this document is not copyrighted.

## 'Starfire' *Cuphea* Hybrid

A.E. Thompson<sup>1</sup>

U.S. Department of Agriculture–Agricultural Research Service, U.S. Water Conservation Laboratory, Phoenix, AZ 85040

W.W. Roath<sup>2</sup> and M.P. Widrechner<sup>3</sup>

North Central Regional Plant Introduction Station, Iowa State University, Ames, IA 50011

Additional index words. *Cuphea*, pot plant

'Starfire' is a sterile hybrid of *Cuphea ignea* A. DC. x *C. angustifolia* Jacq. ex Koehne and is intended as a pot plant for greenhouse or home (Fig. 1). 'Starfire' is the first reported hybrid between these two species (Thompson et al., 1989) and has unique flower and foliage characteristics.

### Origin

'Starfire' is an F<sub>1</sub> hybrid (no. 1070) resulting from a cross between *C. ignea* (PI 534899) and *C. angustifolia* (PI 534892) made at the U.S. Water Conservation Laboratory (USWCL), Phoenix. PI 534899 was derived from a commercial cultivar obtained from Park Seed Co. by Shirley Graham of Kent State Univ., Kent, Ohio. PI 534892 was derived by A.E.T. from a wild collection from Oaxaca, Mexico. Both of these accessions were donated to the National Plant Germplasm System by the USWCL in 1986. This hybrid was released jointly by U.S. Dept. of Agriculture–Agricultural Research Service–USWCL and the Univ. of Arizona, Tucson, in 1990. The hybrid was made in Apr. 1986 (Thompson et al., 1989) and has been propagated from cuttings since then. It is the first intersectional hybrid known in the genus *Cuphea* (Ronis et al., 1990).

*Cuphea ignea* (section *Melvilla*), commonly known as the "firecracker" or "Mexican-cigar" plant, is grown commercially as a pot plant. It is a spreading shrub, 30 to 50 cm tall. The leaves are lanceolate to ovate, 20 to 90 mm long, and bright green with paler green abaxial surfaces. The tubular calyces are generally bright red-orange, tipped dorsally in white and ventrally in dark purple, and are 18 to 26 mm long. Other calyx colors have been reported but are rather rare (S.A. Graham, personal communication, 1993) in this species. There are no petals (Bailey, 1949; S.A. Graham, personal communication, 1993).

Received for publication 14 Apr. 1994. Accepted for publication 11 Oct. 1994. Journal paper no. J-15801 of the Iowa Agriculture and Home Economics Experiment Station, Ames. Project 1018. The cost of publishing this paper was defrayed in part by the payment of page charges. Under postal regulations, this paper therefore must be hereby marked *advertisement* solely to indicate this fact.

<sup>1</sup>Research Geneticist.  
<sup>2</sup>Research Agronomist.  
<sup>3</sup>Horticulturist.

dorsal and four ventral, which is the typical arrangement for the genus. They are subequal, 3 to 7 mm long, and pale to medium purple.

### Description

'Starfire' is intermediate in size to its two parents, 50 to 75 cm tall and 60 to 75 cm wide, with the spreading subshrub shape of the *C. ignea* parent (Fig. 2). Leaves are dark green (green 137A; Royal Horticultural Society, 1966) with a light-green (green 138C) lower surface as in the *C. ignea* parent but are more narrowly lanceolate, 30 to 40 mm long and 12 to 20 mm wide. 'Starfire' flowers continuously once cuttings are established. Calyx tubes are striped pink (pink 63B) on white, dorsally tipped in white, and 10 to 15 mm long, with a pronounced spur. Dorsal petals are white with a purple (purple 75A) vein, ≈5 mm long. Ventral petals are purple (purple 75A) to almost white (purple 75D) and are ≈3 mm long.

*Cuphea angustifolia* (section *Heterodon*), a wild species native to southern Mexico (Graham, 1988), is a 50- to 150-cm-tall, herbaceous to suffrutescent perennial. Its leaves are narrowly lanceolate to linear and 40 to 100 mm long. The calyx tube is 10 to 14 mm long, dorsally light purple, and ventrally pale purple to nearly white. There are six petals, two



Fig. 1. 'Starfire' *Cuphea* hybrid plant.



Fig. 2. Closeup of 'Starfire' *Cuphea* hybrid flowers and foliage.

### Characteristics and use

'Starfire' has a less dense, but more vigorous, growth habit than its *C. ignea* parent. It is particularly adapted as a potted plant and possibly would be useful as a hanging plant for greenhouse or household use. It may have potential as a bedding plant but has not been evaluated for this purpose.

Inasmuch as this is a sterile hybrid, it must be propagated vegetatively. Cuttings root readily with no chemical treatment of any kind when placed in potting soil and kept for 1 week to 10 days under intermittent mist at 20 to 25C. Cuttings grow rapidly, reaching full growth and flower within 4 to 5 weeks when grown in

the greenhouse (20 to 25C, ambient relative humidity 50% to 96%, and a 16-h light period with high-intensity, metal-vapor lights).

### Availability

A limited number of cuttings can be obtained by writing to the North Central Regional Plant Introduction Station, Iowa State Univ., Ames, IA 50011; fax 515/292-6690.

### Literature Cited

Bailey, L.H. 1949. Manual of cultivated plants most commonly grown in the continental United States and Canada. Macmillan, New York.

Graham, S.A. 1988. Revision of *Cuphea* section *Heterodon* (*Lythraceae*). Systematic botany monographs. vol. 20. Amer. Soc. Plant Taxonomists, Ann Arbor, Mich.

Ronis, D.H., A.E. Thompson, D.A. Dierig, and E.R. Johnson. 1990. Isozyme verification of interspecific hybrids of *Cuphea*. HortScience 25:1431-1434.

Royal Horticultural Society. 1966. Royal Horticultural Society colour chart. Royal Hort. Soc., London and Flower Council of Holland, Leiden.

Thompson, A.E., D.A. Dierig, D.H. Ronis, and D.T. Ray. 1989. A new *Cuphea* interspecific hybrid with ornamental potential. ASHS Annu. Mtg., Tulsa, Okla., Prog. & Abstr. p. 80.