'Rutcam' Hot Lips® Trumpet Vine

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Additional index words. *Bignoniaceae*, *Campsis* × *tagliabuana*, ornamental vine

Campsis radicans (L.) Seemann (trumpet vine) is native to eastern North America, whereas *Campsis grandiflora* (Thunb.) K. Schumann (Chinese trumpet vine) is native to eastern Asia (Raulston and Grant, 1994; Wen and Jensen, 1995). Trumpet vine was introduced into cultivation in 1640, whereas Chinese trumpet vine was first observed by Engelbert Kaempfer in Japan in 1691 or 1692 (Stearn, 1953), but was not brought into cultivation in Europe until 1800 (Raulston and Grant, 1994). The first hybrid between the two species was described in 1859 (Stearn, 1953) as *Tecoma tagliabuana* in honor of the brothers Alberto and Carlo Tagliabue in who's nursery the plant was discovered. Rehder (1905) described a hybrid between the two species as *Tecoma hybrida* Jouin. (*Tecoma radicans* × *chinensis*). The plant described in the article was sent to the Arnold Arboretum by the P.J. Berckmans Company of Augusta, GA, under the name of *Tecoma hybrida*, indicating that the hybrid was known in Georgia as early as 1905. *Campsis radicans* and *Campsis chinensis*, while able to produce fertile hybrids, tend to demonstrate a high level of morphological and genetic divergence (Wen and Jensen, 1995).

'Rutcam' trumpet vine [*Campsis* × *tagliabuana* (Vis.) Rehder] is an attractive ornamental vine with reddish-orange flowers that has been released by The University of Georgia.

Origin

The original plant of 'Rutcam' was discovered growing on a fence in a garden in Tift County, GA, in 1993. Semihardwood cuttings were collected in June, treated with a 1:5 dilution of Dip 'N Grow (IBA + NAA; Dip 'N Grow Inc., Clackamas, OR) as a 5-s quick dip and were stuck in 7.9 × 7.9 cm plastic pots filled with a substrate consisting of milled pine bark and perlite (2:1, v/v). Cuttings were placed on a propagation bench in a glass greenhouse and received a mist frequency of 4 s every 10 min during daylight hours. Light exclusion was ≈70%. Greenhouse control temperatures were set at 32 °C (day) and 21 °C (night). Rooting percentage was ≈50% after 90 d.

One of the original cuttings has been growing on a chain-link fence at the University of Georgia Tifton Campus since 1999. The original plant found in 1993 was destroyed when the garden and home site were cleared.

Description

Campsis × *tagliabuana* 'Rutcam' PP19,415 is a woody, deciduous vine which requires support to grow in landscape settings. The plant in Tifton growing on a fence reached a height of 3.0 m with a spread of 4.0 m 8 years after planting (2007) and has been maintained at that size with annual pruning. Leaves are opposite, petiolate, odd-pinnately compound, leaflets mostly 11–13, largest leaves being 6.0 cm in length and 3.0 cm in width. Leaflets are mostly ovate with serrate margins, acuminate leaf tips, and rounded bases. The adaxial surface of leaves are Royal Horticultural Society (RHS, 2001) green 137A and are sparsely pubescent, the abaxial surface being yellow-green 146B with prominent short pubescence, especially on the midrib and lateral veins. The rachis is rounded on the abaxial side, curved to flat on the sides with a depression or groove on the adaxial surface and is very finely pubescent.

The inflorescence is a cyme, flowers in a given cyme up to 16, not all at anthesis at the same time, with flowers being bisexual. The calyx is leathery, cylindric, RHS orange-red 34B, the floral tube being up to 2.5 cm in length, with five triangular lobes at the summit, 11 to 13 mm in length, being finely pubescent on the margins with mucronate tips. The corolla is tubular-campanulate, RHS orange-red 32B, up to 6.5 cm in length with a narrow, cylindric basal portion to 2.0 cm long gradually expanding to a swollen funnel about 4.0 to 4.5 cm in length with the mouth being ≈3.0 cm across. Open flowers are to 7.0 cm across, consisting of five spreading, slightly recurved lobes, being up to 2.2 cm long and 2.7 cm across and the margins having fine hairs. The interior of the corolla funnel has numerous red lines (RHS red group 46A) with a lighter orange red coloration (RHS yellow-orange group 16A) between the lines. There are five stamens (one reduced), in two pairs of unequal length (2.8 to 4.0 cm) with the filaments being curved, glabrous, inserted proximally within the corolla tube and not exerted. The anthers are RHS yellow group 11B, the thecae being divergent and up to 8.0 mm in length. The color of the pollen is RHS yellow group 12C. Each flower consists of one pistil seated on

a thick disc broader than its narrow base. The style is slender, sparsely pubescent, up to 4.5 to 5.5 cm in length. Stigmatic lobes (2) are flat, rounded, and their color is RHS Green yellow 1B.

Mature fruit is a fusiform, bivalved dehiscent capsule, keeled along its sutures, being up to 15.0 cm in length, 1.5 cm in width, with a color of RHS green 137C before drying and dehiscing. Each capsule has many flat seeds, 8.5 mm in length, 6.5 mm wide, having conspicuous wings to either side, with a color of RHS grayed orange 166A. Few fruits are produced on the plant in Tifton, GA. Holotype: field grown plant, Ornamental Horticulture Research Area, The University of Georgia, Tifton, GA, Ruter (VSC).

Cultural Notes

Two to three node subterminal semihardwood cuttings can be rooted throughout the growing season. Finding adequate cutting wood can be difficult as the plant flowers perpetually throughout the summer. Cutting container or field grown plants back during the summer produces new shoots suitable for rooting. Root cuttings have been successfully taken in February. The shoots that arise from root cuttings have juvenile growth characteristics and usually do not flower during the first growing season. Softwood and hardwood cuttings, budding and grafting have also been used to reproduce hybrid trumpet vines (Anderson, 1933; Raulston and Grant, 1994). Vines grown on wooden trellises in production tend to flower better than plants left to grow naturally prostrate. Plants have been successfully produced in container sizes ranging from 2.8 L to 19.6 L. *Campsis* 'Rutcam' grows well in pine bark substrates with the addition of dolomitic limestone, micronutrients, and controlled release fertilizers.

In the landscape, *Campsis* 'Rutcam' begins blooming around the first of May and will continue sporadically until frost (Table 1). In general, 'Rutcam' comes into bloom 7 to 10 d before *C. chinensis* 'Morning Calm' or *C. tagliabuana* 'Madame Galen' when grown in Tifton, GA. In sandy, acidic soils, magnesium deficiency can be a problem easily corrected by the application of Epsom salts (magnesium sulfate). Pest problems are minimal, some late season leaf spots can occur. *Campsis* 'Rutcam' has performed well for

Table 1. Date of first flower for *Campsis chinensis* 'Morning Calm', *Campsis* × *tagliabuana* 'Rutcam', and *Campsis* × *tagliabuana* 'Madame Galen'. The selections 'Morning Calm' and 'Rutcam' were planted in the landscape in Tifton, GA, in 1999, 'Madame Galen' was planted in fall of 2004. All plants were grown under the same cultural conditions.

Taxa	Date of first open flower			
	2002	2003	2005	2006
'Rutcam'	Apr. 30	May 6	Apr. 29	May 1
'Morning Calm'	May 6	May 12	May 11	May 12
'Madame Galen'			May 8	May 10

Received for publication 27 Sept. 2016. Accepted for publication 18 Oct. 2016.

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Table 2. Comparison of key morphological characteristics between *Campsis ×tagliabuana* ‘Rutcam’ and ‘Madame Galen’.

	‘Rutcam’	‘Madame Galen’
Adaxial leaf color	Matte green 137A	Glossy green 139C
Abaxial leaf color	Yellow green 146B	Green 139A
Abaxial leaf pubescence (midrib and lateral veins)	Prominent	Sparse
Rachis pubescence	Prominent	Sparse
Petiolule length (mm)	0.0–9.0	0.0–4.0
Numbers of leaflets	11–13	9–11
Flower diameter (cm)	7.0–8.5	7.5–9.0
Petal color	Red 46B	Orange-red 34A

several years in U.S. Department of Agriculture (USDA) hardiness zone 8b (USDA, 2012). The hybrid, *C. ×tagliabuana*, is reported to survive at the Arnold Arboretum in Boston, MA, with slight protection, whereas *C. chinensis* cannot be grown (Rehder, 1905). Anderson (1933) reported that hybrid trumpet vines are common in southern Massachusetts. *Campsis* ‘Rutcam’ should perform well in USDA hardiness zones 6–8.

Campsis ×tagliabuana ‘Madame Galen’ is the only other hybrid trumpet vine that is commonly sold in nurseries in the United States. Morphologically, *Campsis* ‘Rutcam’ differs in leaf color, leaf and rachis pubescence, petiolule length, number of leaflets, flower size, and petal color (Table 2). Earlier flowering, attractive red flowers, and different

leaf characteristics distinguish ‘Rutcam’ as a novel cultivar.

In the northeastern United States, *C. radicans* is often listed as an invasive weed (NRCS, 2006). The plant spreads rapidly by producing root sprouts or layering. Root sprouting has only been noticed on ‘Rutcam’ after the roots have been mechanically disturbed. *Campsis* ‘Rutcam’ has not shown any tendencies toward invasiveness in USDA 8, sexually or asexually, but should be observed in other areas for potential invasiveness.

Availability

Production and marketing of *Campsis* ‘Rutcam’ has been licensed to McCorkle

Nurseries, Inc. of Dearing, GA (www.mccorklenurseries.com), by the University of Georgia Research Foundation, Inc. (UGARF) and the Georgia Seed Development Commission.

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