

ARNOLD ARBORETUM HARVARD UNIVERSITY



BULLETIN OF POPULAR INFORMATION

SERIES 4. VOL. I

JANUARY 15, 1933

NUMBERS 1 & 2

TRUMPET-CREEPERS. THERE are three parts of the world where Trumpet-creepers grow in abundance. In the central and southern United States, the American Trumpet-creeper is one of the commonest sights of early summer. It carpets the rocky embankments of railroads and highways; it runs up fence posts, launching its orange-red flowers well out into the light and air; in the edge of rich floodplain woods it grows rampantly and climbs to the tops of trees and bushes. On the plains of Texas it is dwarfed, often growing without any support, more like an unkempt shrub than a true vine. Like the American robin, it rejoices in civilization and is probably a more common species today than it was before the country was first settled. It takes to fence rows like a song sparrow. In many parts of the South it has actually become a weed in plowed fields. The storage roots remain far underground, too deep for an ordinary plow. Whenever the top is cut back the roots send up a new crop of branches and so the plants manage to hold their own year after year though they may seldom or never flower.

Halfway around the world the Chinese Trumpet-creeper is found in very similar situations, so much so that its original home does not seem to be known, though it was very probably central China. It is today a common ornamental vine in Chinese towns and villages, occasionally becoming a weed, as does its American cousin. It is a vine or semi-shrub, running up to six or eight feet in height. In the semi-tropical climate of southern China its main flowering period is in early summer and it then blossoms intermittently, a few flowers at a time, during the rest of the season.

The third region in which Trumpet-creepers are common is southern Massachusetts, particularly in the neighborhood of Cape Cod. The

vines which grow there are for the most part hybrids between the American and Chinese species. Most appropriately for man-made varieties they do not take to fields and woodlands as did their wild progenitors, though they make themselves very much at home in the situations where they have been planted. They climb over houses, barns, outbuildings, and garden fences, in complete abandon, their orange-red flowers harmonizing well with the silvery gray of the weathered shingles.

It does not seem to be at all generally realized that these Trumpet-vines of our Massachusetts gardens are not the true American species, but are of hybrid origin. Were it not for the several striking characteristics by which the two species differ it might be difficult, if not impossible, to distinguish in every case between the two species and their hybrid derivatives. The outstanding differences between the species are shown in the accompanying plate. They may be summarized as follows :

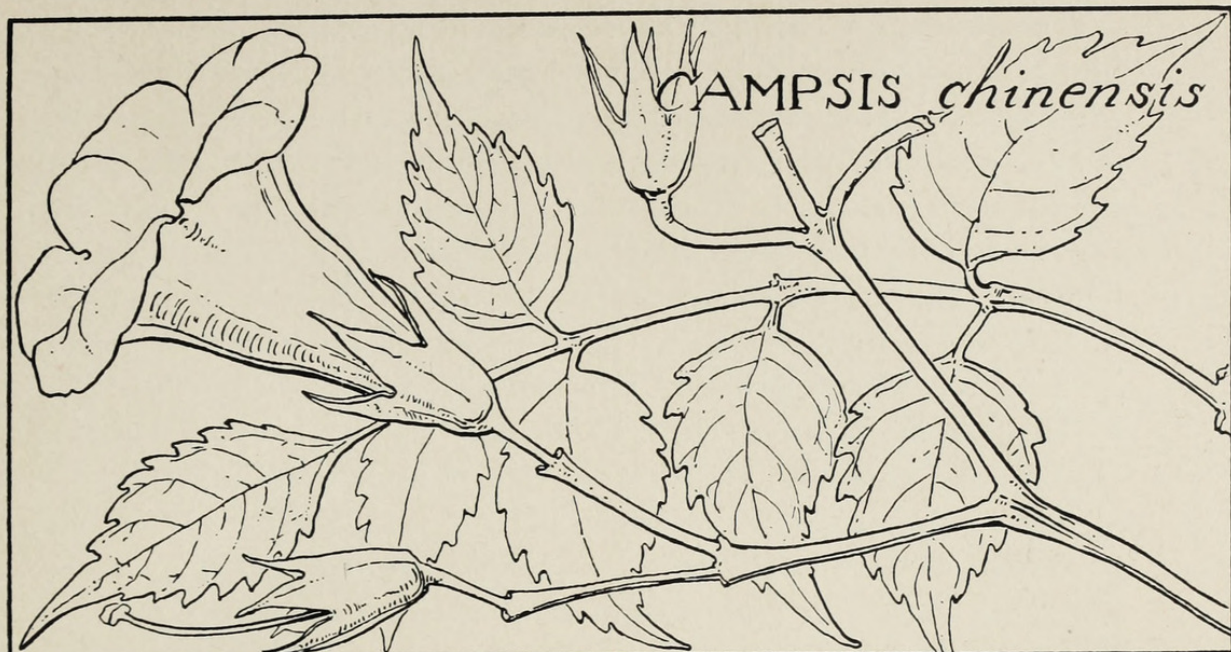
AMERICAN TRUMPET-CREEPER
(*Campsis radicans* Seem.)

Leaves hairy beneath, along the veins
Flower tubular
Sepals relatively short
Petal lobes small
Flowers usually orange-red
Flower cluster compact
Aerial roots common
Vines up to thirty feet long

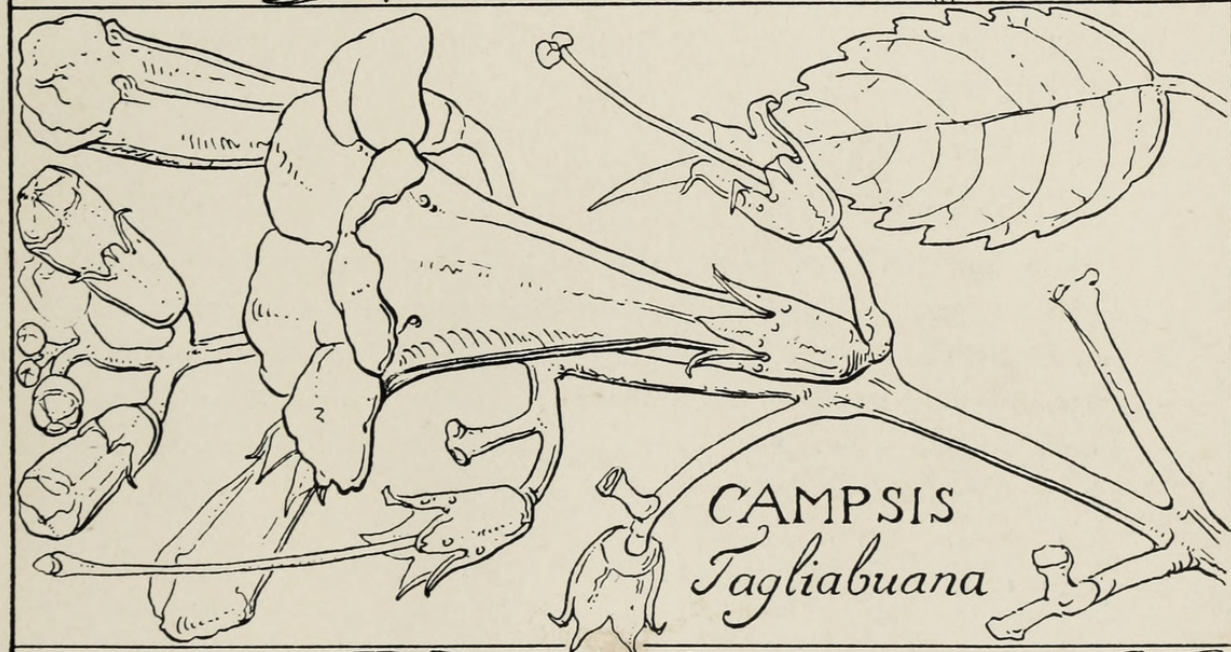
CHINESE TRUMPET-CREEPER
(*Campsis chinensis* Voss.)

Leaves smooth beneath
Flower bell-shaped
Sepals relatively long
Petal lobes large
Flowers usually scarlet-red
Flower cluster open
Aerial roots rare
Vines up to ten feet long

The immediate hybrids, those of the so-called first hybrid generation, are intermediate in all these characteristics as is shown in Plate 1. Their seedlings are a variable lot and include many which superficially resemble one parent or the other. The two species differ in their hardiness, or at least their cultivated representatives do so. *Campsis radicans* is completely hardy in the Arboretum but although plants of *C. chinensis* have been grown, and for that matter have flowered, they have eventually died out during cold winters. At Flushing, Long Island, in the old Parson's Nursery there was for many years a large specimen of the Chinese species which received no winter protection in its later years. As in the case of Magnolias and many other woody plants, well established specimens seem to be hardier than young seedlings.



CAMPSIS *chinensis*



CAMPSIS
Tagliabuana



CAMPSIS
radicans

Though many of our Massachusetts vines are garden varieties of hybrid origin, little seems to be known as to where they were produced or by whom. They probably came into being in a number of places, as the two species cross readily and are often grown from seed. Both species have been in cultivation in European gardens for over a century and there have been many opportunities for the production of hybrids. The American species has been in cultivation in England since at least 1640; the Chinese species was introduced in 1800. They are not often cultivated in northern Europe since the climate is a little too cool, but in southern France and in Italy they are common features of parks and gardens. Whether the first hybrids were intentional or merely a happy accident we cannot say. It is quite possible they may have been an accident, if the experiments made some years ago at the Botanical Garden in Washington are at all representative. Noticing that both species then in flower in the garden were being repeatedly visited by humming birds, W. R. Smith collected the seeds which set naturally on the vines and raised a number of seedlings. All of them were hybrids, brought about by the cross-pollinating agencies of bees and humming birds.

The first published reference to the hybrids was in 1859 when an Italian botanist, Roberto de Visiani, described them and differentiated them from the parental species. He gave the hybrids the name *Tecoma Tagliabuana* in honor of the brothers Tagliabue, “*de horticultura italica optime meritis, et a quibus novam ignotaeque originis plantam acceptem refero*,” to quote from the original dedication.

The hybrids are nearly as fertile as the parental species and from them have sprung a host of secondary hybrids, grandchildren of the original cross and back-crosses to the American and Chinese species. They combine the characteristics of the two species in various ways and are common in cultivation, though most of them masquerade in nursery catalogues as varieties of the American Trumpet-creeper. Such, for instance, is the “*Bignonia radicans grandiflora atropurpurea*” of catalogues and horticultural literature. When carefully examined the influence of *C. chinensis* can be seen in the longer sepals and in the more open flower clusters. Only one of the hybrids in the Arboretum collection is really outstanding, the named variety, “Mme. Galen”. It comes very near to uniting the best qualities of both species. Like the American Trumpet-creeper, it is hardy in New England. Like the Chinese species, it has large and flaring flowers; like that species, too, is its flower cluster with the brilliant flowers set well apart so that

they show to best advantage. While it is occasionally seen in eastern gardens it is almost unknown in the middle West, where Trumpet-creepers grow unusually well. It is a splendid ornamental vine and is deserving of far wider recognition in American gardens.

In planting Trumpet-creepers it should be remembered that they are a little slow in establishing themselves; they should not be placed where they will have to compete with more vigorous vines or shrubs during the first few years. Once they are well established they have amazing vigor and will profit by heavy pruning, especially so if a good showing of flowers is desired. The vines bloom on wood of the current season's growth and for that reason one does not sacrifice even one season of blossom by cutting them back severely. They sometimes sucker freely from the widespread roots and may become troublesome unless they are kept within bounds. Trumpet-creepers show to their best advantage in a garden if they are trained to a post and are headed back even with the top of the post every spring. Treated in this manner they throw out a thicket of young branches each year, which becomes a brilliant bouquet of flowers during the middle of the summer. In the right setting a row of such pillars would be very effective in a formal garden.

Trumpet-creepers are easily propagated. They grow well from seed, though the seedlings resent shifting about and should be kept as long as possible in the same pot. Desirable varieties such as "Mme Galen" can be propagated either from hardwood cuttings or by top-grafting on to large plants of the commoner varieties.

NOMENCLATORIAL NOTE

THE TRUMPET-CREEPERS have had the misfortune to be classified under three genera, *Bignonia*, *Tecoma*, and *Campsis*. For technical reasons the Arboretum prefers the latter name, though many botanists still use *Tecoma*. *Tecoma radicans* Juss., and *Campsis radicans* Seem., are different names for the same species, the American Trumpet-creeper. The Chinese species is known as *Tecoma grandiflora* Loisel, or *Campsis chinensis* Voss. The hybrid is called *Tecoma Tagliabuana* Vis., *Tecoma hybrida* Jouin, as well as *Campsis Tagliabuana* (Vis.) Rehd., the name preferred by the Arnold Arboretum.

EDGAR ANDERSON

Growing on the immediate banks of streams, the River Birch frequently overhangs the water, on the surface of which it may be reflected, and the silhouette of its shaggy trunk and graceful branches seen in the open vistas of the river often adds a striking touch of beauty to the landscape, and suggests the possibility of similar effects for planting along the margins of ponds or lakes.

Though the River Birch may be too ragged and unsymmetrical for general planting along streets and avenues, it should not remain neglected and unknown. For as Michaux observes in his *North America Sylva*, "If the good properties of the Birch are not brilliant, they are at least numerous and useful".

EDGAR ANDERSON

ERNEST J. PALMER

EXPLANATION OF PLATES

Plate 1, page 3.

Campsis Tagliabuana, Campsis radicans and Campsis chinensis.

(Drawing by Blanche Ames Ames.)

Insert Plate.

Campsis Tagliabuana var. Mme. Galen.

(Drawing by Blanche Ames Ames.)



Anderson, Edgar. 1933. "Trumpet-creepers." *Bulletin of popular information - Arnold Arboretum, Harvard University* 1(1-2), 1-5.

<https://doi.org/10.5962/p.250123>.

View This Item Online: <https://www.biodiversitylibrary.org/item/217004>

DOI: <https://doi.org/10.5962/p.250123>

Permalink: <https://www.biodiversitylibrary.org/partpdf/250123>

Holding Institution

Harvard University Botany Libraries

Sponsored by

BHL-SIL-FEDLINK

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Arnold Arboretum of Harvard University

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.