

Calystegia*, with special reference to distinguishing *C. pulchra* from pink-flowered forms of *C. sepium* and *C. silvatica

In Norfolk, we see *Calystegia pulchra* very infrequently, and most pink-flowered *Calystegia* plants (not including *C. soldanella*) are forms of *C. sepium*, or less often, *C. silvatica*. These finds usually result in some uncertainty, mainly because we don't see pink-flowered *Calystegia* often enough to get the rather involved nomenclature and ID characters into our heads.

In fact, it should be possible to name the pink-flowered taxa quite easily in the field using the usual bracteole, flower size and leaf sinus characters, along with just 3 other additional characters:

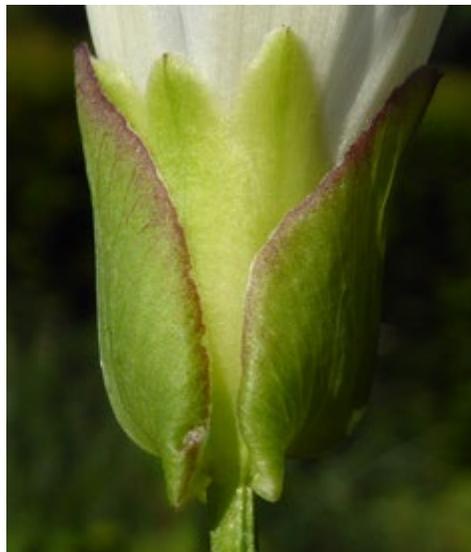
- i) Presence or absence of short hairs on the petioles, pedicels and stem apex: present in *Calystegia pulchra* and *C. sepium* ssp. *roseata*. These hairs are usually sparse and may take some finding.
- ii) Presence or absence of winging on the pedicels: present in *Calystegia pulchra* only (and then, not always)
- iii) The depth and distribution of the pink coloration on the corolla: in *Calystegia pulchra* the corolla is a deep pink on both sides and usually white stripes are present; in *C. sepium* ssp. *roseata* the corolla is also pink on both sides and again usually white striped; in *C. sepium* f. *colorata*, and occasionally in *C. silvatica* (un-named form) the pink is a very pale shade and confined to lines or blotches on the outside of the corolla only.



C. silvatica showing inflated bracts



Corolla showing white interior



C. sepium showing uninflated bracts



White corolla of *C. sepium* ssp. *sepium*

The Norfolk Flora Group finds *C. sepium* ssp. *sepium* f. *colorata* fairly frequently, but the other three taxa are all very scarce. This would seem to be the case elsewhere in the British Isles, other than near the west coast, or in Ireland, where *C. sepium* ssp. *roseata* is more frequent.



C. sepium ssp. *roseata*



C. pulchra



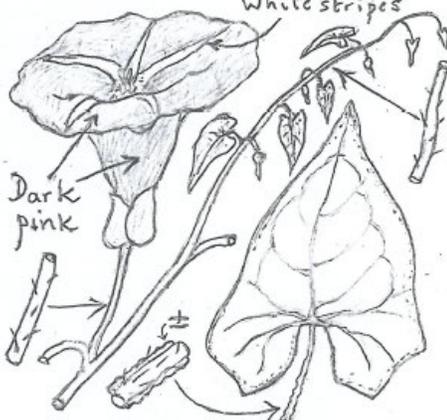
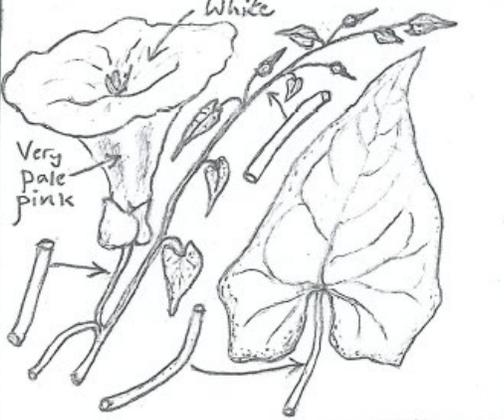
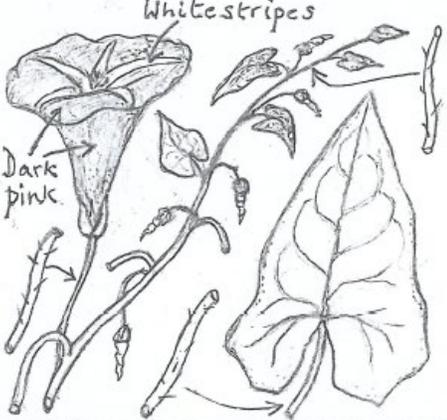
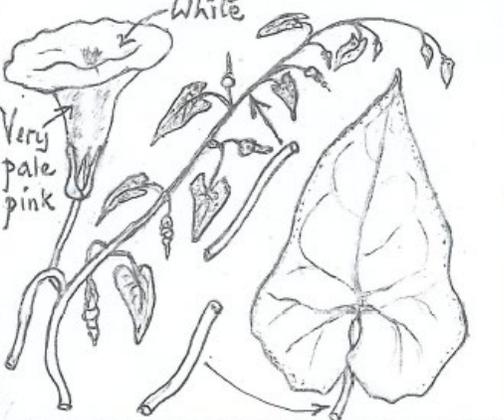
C. pulchra showing inflated bracts



Hairy pedicel in *C. pulchra*

Visual key to pink-flowered *Calystegia* taxa

1. <i>C. SOLDANELLA</i>	Confined to sand dunes and coastal shingle		
1. <i>C. sepium</i> , <i>silvatica</i> & <i>pulchra</i>			2.
2. Bracts strongly pouched & overlapping			3.
2. Bracts hardly pouched or overlapping (sepals visible from 2 'sideways' views)			4.

	
3 (i) <i>C. PULCHRA</i>	3 (ii) <i>C. SILVATICA</i> (unnamed form)
	
4 (i) <i>C. SEPIUM</i> ssp. <i>ROSEATA</i>	4 (ii) <i>C. SEPIUM</i> f. <i>COLORATA</i>

Vegetative identification

One bone of contention during recording is the reliability of leaf characters in *Calystegia* and whether one should attempt to make a vegetative identification.



C. silvatica



C. sepium



C. pulchra

Brummit (BSBI Plant Crib, 1998) states that the three species can be separated with around 90% accuracy using the following leaf characters:

- i) The shape of the leaf sinus: V-shaped in *Calystegia sepium*, rounded in *C. silvatica* and square in *C. pulchra*.
- ii) The relationship of the lowest lateral veins to the leaf sinus: running along the sinus in *C. silvatica* and *C. pulchra* and not in *C. sepium*.
- iii) Whether the upper leaf surface is matt or shiny: matt in *C. pulchra*, shiny in *C. silvatica* and *C. sepium*.

My personal view is that it is possible to make a vegetative ID of *Calystegia sepium* if the leaves are small, shiny above and have a narrowly V-shaped sinus; and of *C. silvatica* if the leaves are large and shiny above, with a broadly rounded sinus. Unfortunately one finds many plants not in flower with either broadly v-shaped or narrowly rounded sinuses, which I don't feel can be identified. *Calystegia pulchra* should have leaves that are large, with a matt upper surface and a square sinus, but such plants should be re-checked when in flower.

The descriptions and illustrations in the 1998 Plant Crib are very helpful although the leaf sinus of both *C. silvatica* and *C. sepium* is shown as being too wide; in fact the sinus of *C. sepium* is often so narrow that the inner edges of the two auricles overlap.

Bob Leaney

Acknowledgements: Thank you to Mike Crewe for the photographs, which were sourced from his Flora of East Anglia: An Identification Guide <http://webidguides.com/>

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