

Great Willowherb *Epilobium hirsutum*

Great Willowherb ranges across much of Asia, North Africa and Europe but is absent from Scandinavia and north-west Scotland. It grows in damp areas such as river and ditch banks where it forms dense clusters. Like Meadowsweet, the other flower in Mary Findell's painting, it develops rhizomatous root-mats, allowing it to compete with other strong-growing herbs such as nettles. It does not tolerate much shade so occurs early in successional habitats.

The flowers are normally pollinated by bees and hoverflies that feed on the abundant nectar and pollen but the stigmas and anthers ripen together and the plant is capable of self-pollination. Insect cross-pollination is aided by the more prominent position of the stigmas. In the absence of insects the stigmas curl back and touch the anthers.



Photo: Magnus Manske
http://bit.ly/Altica_lythri

A number of insects feed on the leaves including the larvae of Elephant Hawkmoth, *Deilephila elpenor*, one of our largest moths. The 3 inch long caterpillars are eaten by birds and the spectacularly coloured adults, with a wing span of almost 3 inches, are taken by some bat species. Another herbivore is the Chrysomelid flea-beetle *Altica lythri*. It feeds almost exclusively on the Great Willowherb. The beetle

is, in turn, parasitized by wasps of the *Perilitus* genus and the tachinid fly, *Degeeria luctuosa*, nematodes and *Verticillium* fungi. The bug, *Dicyphus epilobii*, is a predator, feeding on *A. lythri* eggs, and the shield beetle, *Zicrona caerulea*, attacks the larvae, so are typically found on the Great Willowherb. *Epilobium Hirsutum* supports a complex ecosystem.



Meadowsweet and Great Willow Herb
Painting by Mary Findell



[*Epilobium*]
WILLOWHERB HYBRID CHART

<u>[<i>Epilobium</i>]</u> WILLOWHERB HYBRIDS BSBI MAPS	<u>Chickweed</u> <u>Willowherb</u> (<i>alsinifolium</i>)	<u>Alpine</u> <u>Willowherb</u> (<i>anagallidifolium</i>)	<u>New Zealand</u> <u>Willow-herb</u> (<i>brunnescens</i>)	<u>American</u> <u>Willowherb</u> (<i>ciliatum</i>)	<u>Great</u> <u>Willowherb</u> (<i>hirsutum</i>)	<u>Spear-leaved</u> <u>Willowherb</u> (<i>lanceolatum</i>)	<u>Broad-leaved</u> <u>Willowherb</u> (<i>montanum</i>)	<u>Short-fruited</u> <u>Willow-herb</u> (<i>obscurum</i>)	<u>Marsh</u> <u>Willowherb</u> (<i>palustre</i>)	<u>Hoary</u> <u>Willowherb</u> (<i>parviflorum</i>)	<u>Rockery</u> <u>Willowherb</u> (<i>pedunculare</i>)	<u>Pale</u> <u>Willow-herb</u> (<i>roseum</i>)	<u>Square-stalked</u> <u>Willowherb</u> (<i>tetragonum</i>)
<u>Square-stalked</u> <u>Willowherb</u> (<i>tetragonum</i>)				<u>Epilobium</u> x <u>mentiens</u>	<u>Epilobium</u> x <u>brevipilum</u>	<u>Epilobium</u> x <u>fallacinum</u>	<u>Epilobium</u> x <u>haussknechtianum</u>	<u>Epilobium</u> x <u>semiobscurum</u>	<u>Epilobium</u> x <u>laschianum</u>	<u>Epilobium</u> x <u>palatinum</u>		<u>Epilobium</u> x <u>borbasianum</u>	
<u>Pale</u> <u>Willow-herb</u> (<i>roseum</i>)				<u>Epilobium</u> x <u>nutantiflorum</u>	<u>Epilobium</u> x <u>goerzii</u>	<u>Epilobium</u> x <u>abortivum</u>	<u>Epilobium</u> x <u>heterocale</u>	<u>Epilobium</u> x <u>brachiatum</u>	<u>Epilobium</u> x <u>purpureum</u>	<u>Epilobium</u> x <u>persicinum</u>			<u>Epilobium</u> x <u>borbasianum</u>
<u>Rockery</u> <u>Willowherb</u> (<i>pedunculare</i>)							<u>Epilobium</u> x <u>kitcheneri</u>						
<u>Hoary</u> <u>Willowherb</u> (<i>parviflorum</i>)			<u>Epilobium</u> x <u>argillaceum</u>	<u>Epilobium</u> x <u>floridulum</u>	<u>Epilobium</u> x <u>subhirsutum</u>	<u>Epilobium</u> x <u>aschersonianum</u>	<u>Epilobium</u> x <u>limosum</u>	<u>Epilobium</u> x <u>dacicum</u>	<u>Epilobium</u> x <u>rivulare</u>			<u>Epilobium</u> x <u>persicinum</u>	<u>Epilobium</u> x <u>palatinum</u>
<u>Marsh</u> <u>Willowherb</u> (<i>palustre</i>)	<u>Epilobium</u> x <u>haynaldianum</u>	<u>Epilobium</u> x <u>dasycarpum</u>	<u>Epilobium</u> x <u>chateri</u>	<u>Epilobium</u> x <u>fossicola</u>	<u>Epilobium</u> x <u>waterfallii</u>		<u>Epilobium</u> x <u>montaniforme</u>	<u>Epilobium</u> x <u>schmidtianum</u>		<u>Epilobium</u> x <u>rivulare</u>		<u>Epilobium</u> x <u>purpureum</u>	<u>Epilobium</u> x <u>laschianum</u>
<u>Short-fruited</u> <u>Willow-herb</u> (<i>obscurum</i>)	<u>Epilobium</u> x <u>rivulicola</u>	<u>Epilobium</u> x <u>marshallianum</u>	<u>Epilobium</u> x <u>obscurescens</u>	<u>Epilobium</u> x <u>vicinum</u>	<u>Epilobium</u> x <u>anglicum</u>	<u>Epilobium</u> x <u>lamotteanum</u>	<u>Epilobium</u> x <u>aggregatum</u>		<u>Epilobium</u> x <u>schmidtianum</u>	<u>Epilobium</u> x <u>dacicum</u>		<u>Epilobium</u> x <u>brachiatum</u>	<u>Epilobium</u> x <u>semiobscurum</u>
<u>Broad-leaved</u> <u>Willowherb</u> (<i>montanum</i>)	<u>Epilobium</u> x <u>facchinii</u>		<u>Epilobium</u> x <u>confusilobum</u>	<u>Epilobium</u> x <u>interjectum</u>	<u>Epilobium</u> x <u>erroneum</u>	<u>Epilobium</u> x <u>neogradense</u>		<u>Epilobium</u> x <u>aggregatum</u>	<u>Epilobium</u> x <u>montaniforme</u>	<u>Epilobium</u> x <u>limosum</u>	<u>Epilobium</u> x <u>kitcheneri</u>	<u>Epilobium</u> x <u>heterocale</u>	<u>Epilobium</u> x <u>haussknechtianum</u>
<u>Spear-leaved</u> <u>Willowherb</u> (<i>lanceolatum</i>)			<u>Epilobium</u> x <u>cornubiense</u>	<u>lanceolatum</u> x <u>ciliatum</u>			<u>Epilobium</u> x <u>neogradense</u>	<u>Epilobium</u> x <u>lamotteanum</u>		<u>Epilobium</u> x <u>aschersonianum</u>		<u>Epilobium</u> x <u>abortivum</u>	<u>Epilobium</u> x <u>fallacinum</u>
<u>Great</u> <u>Willowherb</u> (<i>hirsutum</i>)				<u>Epilobium</u> x <u>novae-civitatensis</u>			<u>Epilobium</u> x <u>erroneum</u>	<u>Epilobium</u> x <u>anglicum</u>	<u>Epilobium</u> x <u>waterfallii</u>	<u>Epilobium</u> x <u>subhirsutum</u>		<u>Epilobium</u> x <u>goerzii</u>	<u>Epilobium</u> x <u>brevipilum</u>
<u>American</u> <u>Willowherb</u> (<i>ciliatum</i>)			<u>Epilobium</u> x <u>brunnatum</u>		<u>Epilobium</u> x <u>novae-civitatensis</u>	<u>lanceolatum</u> x <u>ciliatum</u>	<u>Epilobium</u> x <u>interjectum</u>	<u>Epilobium</u> x <u>vicinum</u>	<u>Epilobium</u> x <u>fossicola</u>	<u>Epilobium</u> x <u>floridulum</u>		<u>Epilobium</u> x <u>nutantiflorum</u>	<u>Epilobium</u> x <u>mentiens</u>
<u>New Zealand</u> <u>Willow-herb</u> (<i>brunnescens</i>)				<u>Epilobium</u> x <u>brunnatum</u>		<u>Epilobium</u> x <u>cornubiense</u>	<u>Epilobium</u> x <u>confusilobum</u>	<u>Epilobium</u> x <u>obscurescens</u>	<u>Epilobium</u> x <u>chateri</u>	<u>Epilobium</u> x <u>argillaceum</u>			
<u>Alpine</u> <u>Willowherb</u> (<i>anagallidifolium</i>)	<u>Epilobium</u> x <u>boissieri</u>							<u>Epilobium</u> x <u>marshallianum</u>	<u>Epilobium</u> x <u>dasycarpum</u>				
<u>Chickweed</u> <u>Willowherb</u> (<i>alsinifolium</i>)		<u>Epilobium</u> x <u>boissieri</u>					<u>Epilobium</u> x <u>facchinii</u>	<u>Epilobium</u> x <u>rivulicola</u>	<u>Epilobium</u> x <u>haynaldianum</u>				

Most species of the willowherb genus, *Epilobium*, hybridize freely as listed in this chart. Rosebay Willowherb, *Chamerion augustifolium*, does not appear as it is a different genus and does not form hybrids with the other willowherbs. Chart by R.W. Darlington. <http://wildflowerfinder.org.uk/>



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