

# Woundworts/Betonies (Stachys) of Britain & Ireland

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- Please send in any photos you would like added, particularly to replace the temporary web ones.

## Is it Stachys?

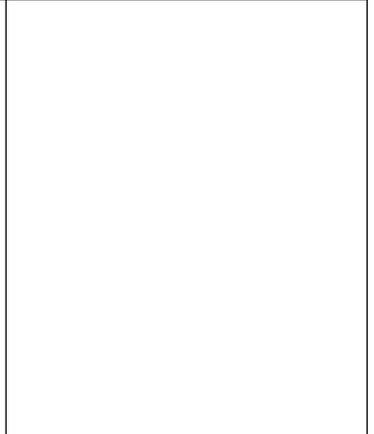
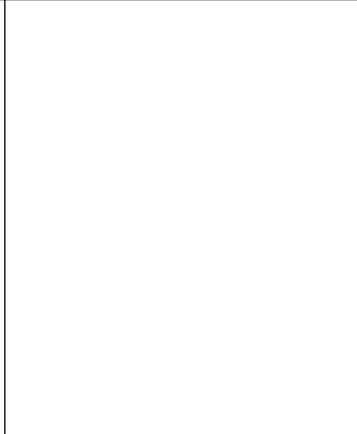
Stachys	Not Stachys	Not Stachys	
 <p>✓ hooded (anthers within) ✓ 3 big parts ✓ poorly split end</p>	 <p>x flat not hooded</p>	 <p>x end well split x small side parts</p>	
Stachys	Not stachys		
 <p>✓ flower leaves smaller than stem leaves</p>	 <p>x flower leaves similar to stem leaves</p>		

# Diagnosis to Species Level

**Hedge Woundwort** (*Stachys sylvatica* L.) - Near universal - [Map](#) - [Photos](#) - [Subtaxa](#) - [Desc](#)



**Limestone Woundwort** (*Stachys alpina* L.) - 4 sites in/nr Wales - [Map](#) - [Photos](#) - [Desc](#)



(1) [Robert Flogaus-Faust @ wikipedia](#) (2) [Olivier Pichard @ wikipedia](#)

**Hybrid Woundwort** (*Stachys x ambigua* Sm.) - Much of W Britain, patchier on E - [Map](#) - [Photos](#) - [Desc](#)



**Marsh Woundwort** (*Stachys palustris* L.) - Near universal (damp spots) - [Map](#) - [Photos](#) - [Desc](#)

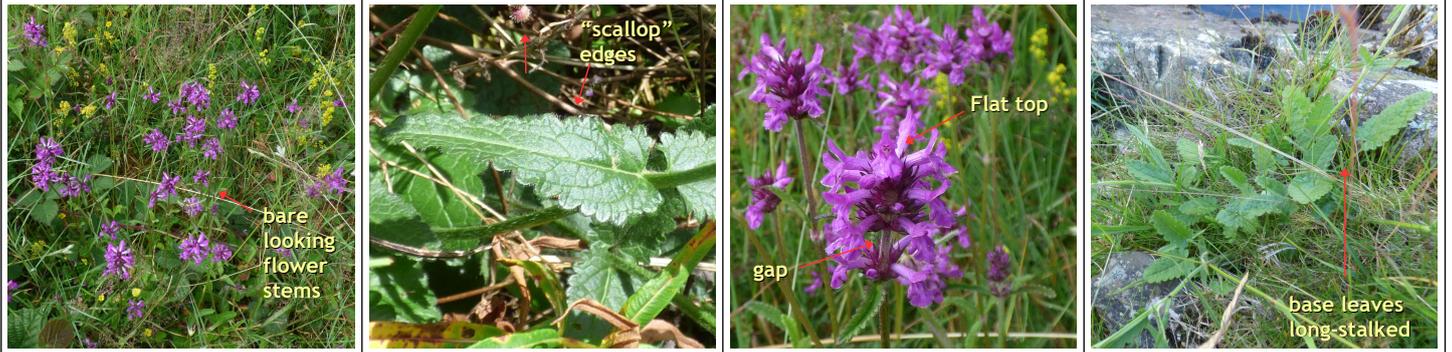


**Field Woundwort** (*Stachys arvensis* (L.) L.) - Common (widespread lowlands) - [Map](#) - [Photos](#) - [Desc](#)



(1) Ben Legler @ biology.burke.washington.edu (2) Roger Darlington @ wildflowerfinder.org.uk

**Betony** (*Betonica officinalis* L.) - Common but rare Scotland, Ireland, Cambs>Norwich - [Map](#) - [Photos](#) - [Subtaxa](#) - [Desc](#)



**Big Betony** (*Betonica macrantha* K.Koch) - rare casual - [Map](#) - [Photos](#) - [Desc](#)



**Downy Woundwort** (*Stachys germanica* L.) - Oxford area, & rare west to Bristol - [Map](#) - [Photos](#) - [Desc](#)

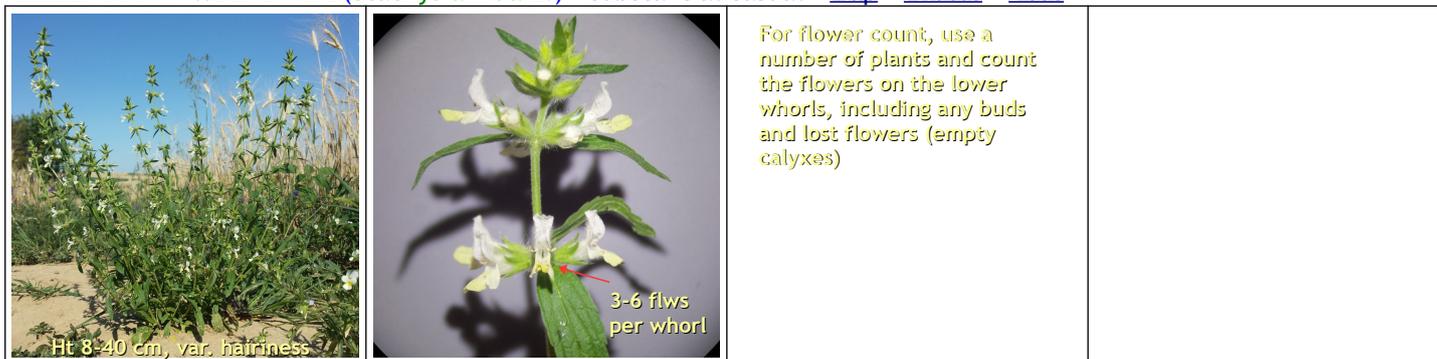


(1) Nadiya Sytschak @ ukrbin.com (2) Ekaterina Kalashnik @ ukrbin.com

**Lamb's-Ear** (*Stachys byzantica* K.Koch) - Widely escapes - [Map](#) - [Photos](#) - [Desc](#)



**Annual Yellow-Woundwort** (*Stachys annua* L.) - substantial casual - [Map](#) - [Photos](#) - [Desc](#)



(1) [Stefan.lefnaer @ wikimedia.org](#) (2) [ibid](#)

**Perennial Yellow-Woundwort** (*Stachys recta* L.) - rare casual - [Map](#) - [Photos](#) - [Desc](#)



(1) [Rostyslav Yurechko @ ukrbin.com](#) (2) [Vedybida Oleksandr @ ukrbin.com](#) (3) [Eugene Novosad @ ukrbin.com](#)

## Subtaxa - Distinguishing Different Forms

Src: Sell & Murrell.

### **B. officinalis (Betony)**

- var. *nana* - Stems 4-15 cm, leaves to 3 cm
- var. *officinalis* - Stems to 80 cm, leaves to 9 cm

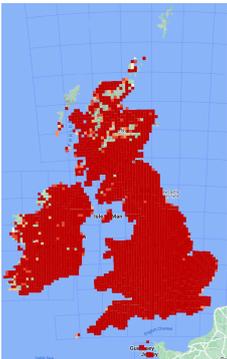
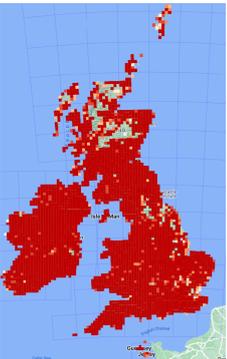
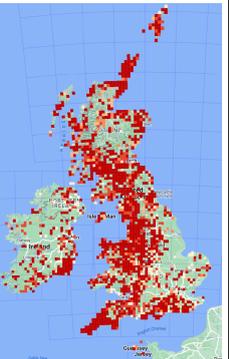
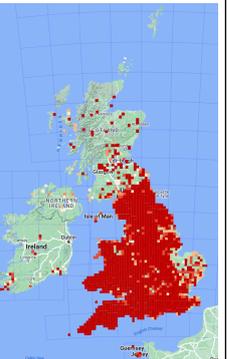
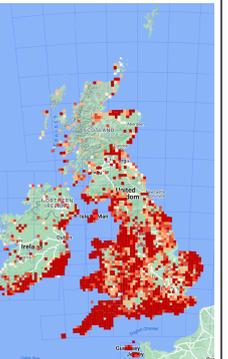
### **S. sylvatica (Hedge Woundwort)**

var. *sylvatica* v var. *subsericea* -

- all parts simple eglandular and glandular hairs : few to numerous v dense
- stem leaves : 5-12 × 3-8 cm v 2-7 × 0.7-5.0

# Maps (Britain & Ireland)

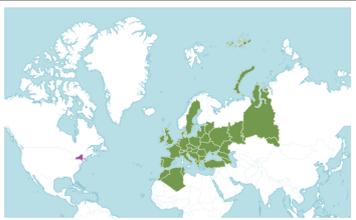
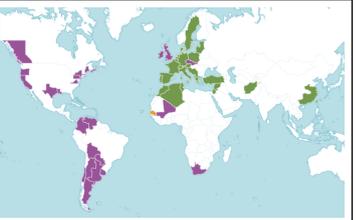
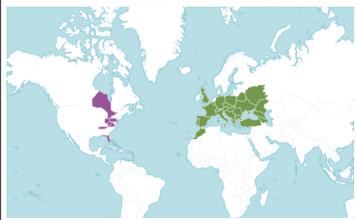
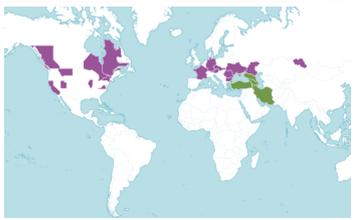
Src [BSBI Maps](#) - see links above each for interactive maps. Non-yellow headers would likely be imperfectly recorded (the map can be used to show presence but not absence).

<p><a href="#"><u><i>S. sylvatica</i></u></a> (Hedge W.)</p> 	<p><a href="#"><u><i>S. palustris</i></u></a> (Marsh W.)</p> 	<p><a href="#"><u><i>S. x ambigua</i></u></a> (Hybrid W.)</p> 	<p><a href="#"><u><i>B. officinalis</i></u></a> (Betony)</p> 	<p><a href="#"><u><i>S. arvensis</i></u></a> (Field W.)</p> 	<p><a href="#"><u><i>S. byzantica</i></u></a> (Lamb's Ear)</p> 
<p><a href="#"><u><i>S. annua</i></u></a> (Annual Yellow W.)</p> 	<p><a href="#"><u><i>S. germanica</i></u></a> (Downy W.)</p> 	<p><a href="#"><u><i>S. macrantha</i></u></a> (Big Betony)</p> 	<p><a href="#"><u><i>S. recta</i></u></a> (Perennial Yellow W.)</p> 	<p><a href="#"><u><i>S. alpina</i></u></a> (Limestone W.)</p> 	

## Maps (World)

Note that a species in other parts of the world may be represented by subspecies and forms not in Britain, which have their own maps.

Src: [Plants of the World \(Kew\)](#) - click the linked name to view details and maps.

<a href="#">S. palustris</a>	<a href="#">S. sylvatica</a>	<a href="#">S. annua</a>	<a href="#">S. recta</a>
			
<a href="#">S. alpina</a>	<a href="#">B. officinalis</a>	<a href="#">S. x ambigua</a>	<a href="#">S. arvensis</a>
			
<a href="#">S. germanica</a>	<a href="#">S. byzantica</a>	<a href="#">S. macrantha</a>	
			

## Descriptions from Old Books & Photos

NOTE that being old descriptions there may be details that have been revised; however they provide a wealth of observations that might not otherwise be encountered.

### Betony (*Betonica/Stachys officinalis*)

#### 1905 Anne Pratt

Wood Betony (*B. officinalis*). - Leaves oblong, heart-shaped, crenate; corolla twice as long as the calyx, middle lobe of the lower lip somewhat notched; perennial. The Betony is a much prettier and brighter plant than the Dead-nettles, and has one peculiarity in its mode of flowering which distinguishes it from most other labiate plants, as it bears what botanists term an interrupted spike. Its flowers appear in July and August, forming, on a slender stem about a foot high, whorls which for an inch or more are crowded closely together; then a piece of the green stalk appears, and below that portion there are again three or four whorls of flowers. The corollas are bright reddish-purple, and there are always two or three pairs of sessile leaves between the divisions of the spike; the lower leaves are all stalked. The plant has a slightly aromatic odour. We have often seen in cottages in Kent, and doubtless there might be seen also in other counties, large bundles of the "medicinal Betony," as Clare calls it, hung up for winter use. An infusion of the plant is taken for colds and coughs, and its slightly tonic properties render it serviceable in low fevers. When used while fresh, the plant has an intoxicating property, which is removed by drying. It is not, perhaps, of any great worth as a medicine, and its rustic uses are doubtless remnants of usages introduced when the true properties of plants were less known. Of all the herbs praised both by British and Continental writers of the olden time, none, if we except the vervain, was more highly esteemed than this. Antonius Musa, the physician to the Emperor Augustus, wrote a whole book setting forth the excellences of the herb, which he said would cure forty-seven different disorders; while Franzius told how even the wild beasts of the forest knew its virtues, and when wounded, availed themselves of its efficacy. Even now the proverbs are in common use in Italy which record its worth: "May you have more virtues than Betony," is sometimes the pious wish of a parting friend; and "Sell your coat, and buy Betony," is an old advice to the sufferer; while, every old English herbal abounds with its praises; and, in Scott's "Demonology and Witchcraft," the reader is told that "the house where Herba Betonica is sown is free from all mischief." The dried leaves, when powdered, excite sneezing, though this effect is probably only the result of the small hairs found on the leaves. In Bacon's "Natural History" we find that it had its uses on this account. He says: "We see sage and Betony bruised for sneezing-powder, or liquors, which the physicians call errhines." An infusion of the leaves for tea was very generally taken by those who were in delicate health; and Sir William Hooker says that the plant is cephalic. The roots are very bitter, and sheep are probably the only animals that will eat the plant, even the goat refusing it. The French call this herb Betoine; the Germans, Betonika; the Dutch, Betonie, and the Italians, Betonico. It grows commonly among bushes, and abounds in many of our woodlands. Bacon observes: "The putting forth of certain herbs discovereth of what nature the ground where they put forth is; as wild thyme showeth good feeding ground for cattle; Betony and strawberries showeth grounds fit for wood; camomile showeth mellow grounds fit for wheat; mustard-seed growing after the plough, showeth a good strong ground, also for wheat; burnet showeth good meadow, and the like." Also known as *Stachys betonica*.

#### 1919 Horwood

Wood Betony (*Stachys officinalis*, Trev.)

Wood Betony is found throughout the Temperate Northern Zone in Europe, N. Africa, and W. Siberia, but has not been met with in early deposits. In Great Britain it grows in the Peninsula, Channel, Thames, Anglia, and Severn provinces; in S. Wales generally except in Radnor; in N. Wales generally except in Montgomery, Merioneth; throughout the Trent province, Mersey, Humber, Tyne, and Lakes provinces except the Isle of Man; in the West Lowlands except Peebles, Selkirk, Haddington; and in Mid and E. Perth; in E. Highlands, in the N. Ebudes, in the W. Highlands. It ranges thus from Skye and Ross southwards, but it is rare in Scotland and Ireland. In Northumberland it is found at 1200 ft.

The name Wood Betony indicates the chief habitat of this species. It certainly loves the shade and is at home in woods, but it is frequent by the roadside, and is also found on heaths and commons with Grassy Stitchwort, Tormentil, Furze, &c.

The stem is erect, simple, square, with blunt angles, rough, with rigid bristles, turned back, and bent. The radical leaves are on long leaf-stalks, oblong, heart-shaped, scalloped, blunt, sparsely hairy, the stem-leaves opposite, narrower, saw-like, turned back, with a turned-back margin.

The flowers are in terminal spikes, oblong, purple, stalkless, in whorls, and the bracts or leaflike organs are as long as the calyx, which is shaggy within, with long teeth. The corolla has a projecting tube, incurved below. The nutlets (4) are three-sided and smooth. Wood Betony is 2 ft. high. The flowers bloom in July and August. The plant is perennial and propagated by division.

The flowers are proteranderous, that is, the anthers ripen first, or they may be homogamous, the stigmas ripening at the same time. The pistil is short at first but lengthens when the anthers have opened. The tube of the corolla is 7 mm. long, smooth inside where the honey is secreted, lined above with erect hairs. The corolla, where included in the

calyx, is narrow, directed obliquely upwards, but horizontal beyond the calyx, and is constantly 2 mm. wide, the under lip is divided into three half-way, acting as an alighting place, and the tip is narrowed. The tube is short, so that the entrance is not wide at the mouth, and the tube is curved like a bee's proboscis. The anthers bearing white beads on their surface open when the flower expands, the stigmas are between them and just behind the short anthers. The divisions of the style are widely spreading, and covered with warts. The style lengthens the wider the anthers spread, and overtops the shorter ones in the process, becoming smeared with pollen, but at length exceeds them, and is first touched by visitors with pollen from another flower, which is prepotent over its own pollen, though it can effectively pollinate itself.

The flowers are visited by *Volucella bombylans*, *Eristalis horticola*, *Zygaena lonicerae*. The blunt-shaped nutlets fall free around the parent plant when ripe. Wood Betony is a humus-loving plant requiring a humus soil, and grows only on heaths or in woods where this is to be obtained.

*Peronospora lamii* and *Puccinia bctonicae* attack Wood Betony.

Two moths, *Colcophora wocksella*, *Idaea strigellaria*, feed on it.

*Stachys*, *Dioscorides*, is Greek for spike or ear, and the second name (Latin) refers to its use in medicine.

This plant is called Betayne, Betony, Wood Betony, Bidney, Bishopswort, Wild Hop, Vetoyn.

According to superstition it averted witchcraft. It was reputed to have great medicinal properties, and there was an old saw [saying] which recommended a person to "sell his coat and buy betony". It was used to cure consumption and lung disease. It has the power of causing intoxication, and when freshly dried the leaves cause sneezing. The roots are bitter and nauseous, cause vomiting and purging.

Dye of a fine dark yellow colour for wool has been obtained from Betony. The leaves have a bitter taste.

Essential Specific Characters:-

256. *Stachys officinalis*, Trev. - Stem erect, leaves radical, ovate-cordate, below crenate, petiolate, upper lanceolate-acute, sessile, flowers purple, in a terminal dense spike, calyx subglabrous. The nuts are blunt.

## **Stachys palustris**

### 1905 Anne Pratt

2. Marsh Woundwort (*S. palustris*). - Leaves linear-lanceolate, or egg-shaped and lanceolate, rounded or heart-shaped at the base, sessile or stalked; whorls of 6-10 flowers, bracts minute, calyx-teeth very acute; stem hollow; perennial. In one variety of this plant the lower leaves are shortly stalked, the upper sessile and somewhat clasping; in another, the leaves have distinct stalks about half the length of the leaf. This Woundwort is very common on river banks and watery places, its widely-creeping roots spreading through the moist soil, and causing much inconvenience to the agriculturist; yet these roots might apparently be turned to good account. Lightfoot, in his "Flora Scotica," says, that in times of scarcity they have served for food, either when boiled or dried, and have been made into bread. Thick tuberous buds form upon the roots, and contain a tasteless farinaceous substance of a highly nutritive character. They are probably the only tubers of any labiate plant which could be used as esculents. Mr. Houlton, some years since, received from the Society of Arts a silver Ceres medal for introducing this plant to public notice, having previously cultivated it, and made various experiments on the root. The roots are dug up by swine from the low moist lands where they are abundant, and eagerly devoured. Gerard praises the virtue of this plant in healing "grievous and mortal wounds." He says he derived his knowledge of its powers from a clown, who cured a wound with it in a week, which would have required forty days with balsam itself; hence he called the plant Clown's Woundwort.

## **Stachys sylvatica**

### 1905 Anne Pratt

1. Hedge Woundwort (*S. sylvatica*). - Leaves egg-shaped and heart-shaped, acute, serrated, long-stalked; upper floral ones linear and entire; whorls of 6-8 flowers distant; calyx-teeth very acute; perennial. This branched hairy plant is common in woods and hedges. Its stem is two or three feet in height, and in July and August its whorls of flowers are numerous, though not close together. They are of a reddish-purple colour, often marked with white. This, as well as the other species, is very nearly allied to the plants of the last genus [Betony], the chief difference between the genera being the shorter tube of the corolla in the Woundworts. It has, especially when bruised, a strong and disagreeable scent. When the green portion of its stem is decayed, so strong a fibre has been left, that it has been suggested that the plant might be used for some of the same purposes as hemp or flax. It also furnishes a good yellow dye. Cattle leave it untouched. When in fruit, the calyx-teeth are remarkably rigid. The species were all formerly considered vulnerary plants. The French call the Woundwort *Stachyde*; the Germans, *Rosnessel*; the Dutch, *Andoorn*; the Italians, *Stachi*; the Spaniards, *Estaquis*; and the Portuguese, *Ortiga morfa dos bosques*. It is commonly called Hedge-nettle in country places.

### 1914 Boulger

CCXLIII. - HEDGE WOUNDWORT.

*Stachys sylvatica* Linne.

DIOSCORIDES named some plant or plants γαλίωψις, galiopsis, and γαλεόβδολον, galeobdolon, from γαλήη, galee, a weasel, ὄψις, opsis, resemblance, βδόλος, bdolos, a stench, apparently from a fancied resemblance of the flower to a weasel, or in both cases from the unpleasant smell of the plants. What this plant, or these plants, were, it is not easy to say, though the name Galeopsis has now attached itself to the Hemp-nettles, and Galeobdolon, as a specific name, to the Yellow Dead-nettle (*Lamium Galeobdolon* Crantz). In Catholic times, moreover, various plants were known as Archangel, perhaps, as Dr. Prior suggests, because they were in flower by May 8th, Old Style, the feast of the Apparition of St. Michael, and might, therefore, have been supposed to be preservatives against evil spirits and witchcraft. Here again several plants appear to have been so designated. In AElfric's tenth-century vocabulary and in another belonging to the thirteenth century, which is printed by Professor Earle, we find, "Archangelica, blinde nettle"; and in the fifteenth-century "Promptorium Parvulorum" is "Archangel, defe nettylle." In his "Libellus de re herbaria" (1538), Turner writes:-

"Anonium dicitur lamium, urtica iners, urtica mortua, & anglice Archangell aut Dede nettell"; "Galeopsis, galeobdolon... uulgo Rede archangell."

In the "Names of Herbes" (1548) he has:-

"Lamium called also Vrtica iners and Anonium, is named in englishe dead nettle or whyte nettle, in duche Weiszneslen, in french Ortie morte, it groweth commonly in hedges."

"Galeopsis after my judgemente is the herbe, whiche is called in englishe red Archaungel. It is lyke Archaungel, but it hath a purple fioure, and lesse leaues and shorter. It groweth in hedges."

The respective editors of these two works, Dr. Daydon Jackson and Mr. Britten, identify these four plants as *Lamium purpureum*, *L. lavigatum*, *L. album*, and *Stachys sylvatica* respectively; but I prefer to consider them to be *L. album* and *L. purpureum*, as first and second in each pair of quotations. Nor can there, I think, be any doubt that the Red, White, and Yellow Archangell of Parkinson's "Theatrum" are *Lamium purpureum*, *L. album*, and *L. Galeobdolon*; while his "Long-leafed red Archangell" may be the pink variety of *L. album*; and his "Galeopsis Genuina Dioscoridis, the true stinking Dead-nettle of Dioscorides," is *Stachys sylvatica* Linne. But, as Parkinson says:-

"I will endeavour what in me lyeth, so to distinguish them, that each shall have their owne due: and if I shall not herein perhaps satisfie every one, for quot homines, tot sententiae, yet I shall satisfie my selfe, who I am perswaded shall not want many partakers; and yet I cannot, nor doe challenge any prerogative of not erring in so intricate a businesse, where so many learned writers have failed before me."

While he describes the root of his Red Archangell as "perishing every yeere," and its leaves as growing closer together "round about the upper joynts," as they do in *Lamium purpureum*, the following is a not inapt description of the Hedge Woundwort (*Stachys sylvatica* Linne), or, as he calls it, *Galeopsis genuina Dioscoridis*. "This kind of Dead Nettle hath divers square, soft, and hairy stalkes, rising up to be three or foure foote high, at the joynts whereof grow two leaves a peece upon long foote-stalkes, very like unto Nettle leaves, but that they are soft and somewhat hoary or hairy, but not stinging at all, of a very strong sent somewhat unpleasant, especially growing in shadowy places, and nothing so strong in the open fields: at the toppes of the stalkes grow the flowers set in the rundles, foure or five at a space, and many of them one above another, in manner of a spike, every one standing in a greenish huske, like unto those of the former Dead Nettles, but not so great and are of a sad red or purplish colour, especially the heads or upper parts; but the lower labells or lippes, have some white spots in them: within those huskes after the flowers are fallen, grow small round, yet somewhat rough seede, foure for the most part standing together: the roote is composed of many strings, shooting fresh heads every yeare, and increasing thereby very much." This plant, he says, was then (1640) "very frequent in our land, in divers countries, as at Hampsted going from the towne to the Church, and many other places from Hampsted heath to London."

The genus *Stachys* comprises some two hundred species of plants, mostly herbaceous, of cosmopolitan distribution, with the exception of Australasia, but chiefly belonging to the Northern Hemisphere. Their flowers are usually in terminal spikes of verticillasters (Parkinson's "rundles"), from which the name *Stachys*, the στάχυς, stachus, of Dioscorides, meaning an ear of corn, has its origin. The sub-genus *Eu-stachys* has more or less interrupted or open spikes; whilst the sub-genus *Betonica*, represented by the common Wood Betony (*Stachys officinalis* Franchet), has them short and densely crowded. The calyx is sub-campanulate, with five or ten ribs and five equal teeth: the corolla has a tube as long as the calyx, an arched upper lip and a lower one divided into three unequal lobes; and the lateral lobes bend backward before withering. The anterior stamens are the longer: the filaments are parallel; and the anthers are connivent, smooth, and longitudinally dehiscent.

There are upwards of fifty European species, six of which are apparently indigenous in England, though only four of these occur in Scotland and Ireland. Two annual species, *S. arvensis* Linne, a weed in cornfields, and *S. annua* Linne, an alien established in similar situations in Kent, have homogamous flowers; but the perennial forms are protandrous. The corolla-tube of the Hedge Woundwort (*S. sylvatica* Linne) is eleven millimetres long and is often filled with nectar to a depth of two or three millimetres.

The name Woundwort, no doubt, originally referred to the use of the fresh leaves, like so many other softly downy leaves, as a styptic, though practitioners imagined later on that an infusion of the plant had a similar effect.

The Chinese and Japanese species, *S. Sieboldi* Miquel, produces numbers of small white tubers, which in form much resemble the rattle of the rattlesnake. They have a flavour resembling artichokes and are cultivated, chiefly in France, under the names of Crosnes du Japon or Chinese artichokes.

## Unrelated plants of similar form

Lamium/Dead-Nettles  
Lamiastrum/Archangels  
Galeopsis/Hemp-Nettles

## Botanical Descriptions (Selected)

As it is hard to come by good descriptions of some of the taxa, here are a few.

Sources: FBI Tutin & Clapham ed 3, FEU Flora Europaea, FoT v7 Flora of Turkey vol 7.

### *S. x ambigua* (Hybrid Woundwort)

FBI - has oblong shortly-petiolate lvs, bright red fls, and a foetid smell and is normally sterile. It is widespread and not uncommon with the parents, or in the absence of one or both of them.

### *S. annua* (Annual Yellow Woundwort)

FBI - Annual 10-30 cm, much-branched, pubescent and sometimes glandular. Lvs 2-6 cm, oblong, obtuse, cuneate at base, shallowly crenate, the lower shortly petiolate, the upper sessile. Whorls 3-6-fld, in the axils of lanceolate acute bracts, passing into the lvs below. Bracteoles linear, very small. Calyx c.8 mm, tubular-campanulate, hirsute; teeth narrowly triangular-lanceolate, mucronate. Corolla 11-13 mm, white or pale yellow. Fl. 6-10. Visited by humblebees. Introduced. A casual recorded from many localities in waste places and formerly an abundant weed of cornfields, now much reduced; rarely naturalized.

FEU - Erect, pubescent and sometimes glandular annual, rarely short-lived perennial 10-40 cm. Leaves 10-60 x 5-20(30) mm, lanceolate, acute, rounded or cuneate at base, crenate or crenate-dentate, glabrous or pubescent. Verticillasters 2- to 6-flowered, the upper crowded, the lower distant. Calyx 5-8 mm, hirsute and with sessile glands; teeth equal, c. 1/2 as long as tube. Corolla 10-16 mm, white or pale yellow, sometimes with red spots; tube exceeding calyx; upper lip 3-7 mm, entire; lower lip 4-7 mm. Cultivated fields and other open habitats; somewhat calcicole.

FoT v7 - Suffrutescent perennial, biennial or annual with or without basal sterile rosettes. Flowering stems usually procumbent, simple or branched, c. 8-50 cm. Stem densely or sparsely retrorse-pubescent, sometimes glabrous at base or throughout, rarely with patent glandular hairs throughout. Basal leaves ovate-oblong to ovate-lanceolate, 1-4.5 x 0.5-2.5 cm, crenate, cordate to attenuate at base, petiole 1-5 cm. Cauline leaves ovate-rhomboid, broadly lanceolate to oblanceolate, 1-3 x 0.5-1.5 cm, crenate-dentate, cuneate to attenuate at base, shortly petioled to sessile, c. 1 cm. Floral leaves elliptic to linear-lanceolate, 1-2 x 0.5-0.8 cm, weakly crenate or entire, sessile to sessile, as long as or slightly longer than verticillasters above. Leaf indumentum sparsely adpressed-pubescent, sometimes glabrescent with sessile glands. Verticillasters usually remote, 1.5-4 cm distant, few +- approximate above, 4-8-flowered.

Bracteoles few, setaceous, 1-2 mm. Pedicels 1-1.5 mm. Calyx sub-bilabiate, sub-campanulate to campanulate, 10-11 mm, +- gibbous at base in fruit; teeth triangular-subulate to lanceolate with 0.5-2 mm hairy spinulescent tip, 1/2-3/4 x calyx tube, calyx lips curved, tube densely villous to adpressed pubescent, sometimes glabrescent, with or without glandular hairs. Corolla creamy-yellow with red markings, 13-19 mm, tube exerted, saccate at base. Nutlets obovoid, 2 x 1.3 mm. [Details of 3 subspecies with 2 variants.]

### *S. alpina* (Limestone Woundwort)

FBI - Perennial 40-100 cm, green, hairy, glandular above. Lf-blades 4-16 cm, ovate, cordate at base, crenate-serrate; petioles 3-10cm. Whorls many-fld, distant in the axils of sessile ovate or lanceolate bracts, the lower crenate-serrate, lf-like, the uppermost smaller, entire. Bracteoles entire, nearly as long as the calyx. Calyx c.8 mm, tubular, glandular-hairy; teeth less than half as long as the tube, triangular-ovate, mucronate, somewhat unequal. Corolla 15-20 mm, dull purple, rarely tinged with yellow, hairy. Fl. 6-8. Native. Very rare in open woods in Gloucester and Denbigh.

FEU - Stems 30-100 cm, hirsute or hirsute-tomentose and with glandular hairs at least above. Leaves 50-180 x 30-90 mm, oblong-ovate or ovate, cordate at base, grey or grey-green. Calyx 6-12 mm, glandular; teeth unequal, the upper 2 c. 1/2 as long as tube. Corolla 15-22 mm, dull purple, rarely tinged with yellow. Shady places, mainly in the mountains.

### *S. arvensis* (Field Woundwort)

FBI - Annual 10-25 cm with slender ascending stems usually branched at the base, hirsute. Lf-blades 1.5-3 cm, ovate, obtuse, truncate or cordate at base, crenate-serrate, petiolate. Whorls 2-6-fld, in the axils of bracts resembling the lvs but becoming much smaller and sessile above, forming a very lax spike, much interrupted below. Bracteoles linear, very small. Calyx 4-6 mm, tubular-campanulate, hirsute; teeth triangular-lanceolate or triangular-ovate, mucronate.

Corolla 6-7 mm, pale purple. Fl. 4-11. Self-pollinated, insect visits few. Native. Arable fields on non-calcareous soils; ascending to 380m.

FEU - Erect, hirsute annual 10-40 cm. Leaves 10-40 x 8-30 mm, cordate-ovate, obtuse, crenate, hirsute. Verticillasters 4- to 6-flowered, usually 6-12, the upper crowded, the lower distant. Calyx 5-7(8) mm, hirsute; teeth about as long as tube. Corolla 6-8 mm, white, pale pink or purple, scarcely exceeding calyx; upper lip c. 2 mm, entire; lower lip 2-3 mm. Cultivated fields and sandy ground; usually calcifuge.

### **S. byzantina (Lamb's-Ear)**

FEU - Stems 15-80 cm, densely white-lanate-tomentose. Leaves (6)30-100 x (3)15-40 mm, the lower oblong-spathulate, the upper elliptical, all attenuate at base and very densely white-sericeous-lanate. Calyx 8-12 mm; teeth c. 1/3 as long as tube. Corolla 15-25 mm. Widely cultivated for ornament and locally naturalized.

### **S. germanica (Downy Woundwort)**

FBI - Perennial or biennial 30-80cm. Whole plant densely covered with long white silky hairs, giving it a whitish appearance. Lf-blades 5–12 cm, ovate-oblong to lanceolate, cuneate to cordate at base, crenate, the lower with long petioles, the upper sessile or nearly so; venation reticulate, conspicuous. Whorls many-fld, forming a dense terminal spike interrupted below; bracts lanceolate, passing into the lvs. Bracteoles linear, nearly as long as the calyx. Calyx 9-11 mm, tubular, very silky, with triangular mucronate, somewhat unequal teeth less than half as long as the tube. Corolla c. twice as long as the calyx, pale pinkish-purple, hairy outside. Fl. 7-8. Pollinated by bees; protandrous; small female fls occur.  $2n = 30$ . Hs. Native. Pastures and hedgebanks, very rare.

FEU - Stems 30-100(120) cm, tomentose or lanate-tomentose, eglandular. Leaves 30-120 x 10-50 mm, oblong to oblong-ovate, cordate, grey-tomentose beneath, green above. Calyx 6-12 mm, eglandular; teeth unequal, the upper 2 [are] 1/3–1/2 as long as tube. Corolla 15-20 mm. Subsp. *germanica*: Lowest bracts cuneate at base, widest above the base. Calyx-teeth c. 1/2 as long as tube.

### **S. macrantha (Big Betony)**

FoT v7 - Flowering stems erect, usually unbranched, 10-60 cm, sparsely to densely hirsute, with 1-2 pairs of leaves. Basal leaves broadly ovate-triangular, lamina 2-15 x 1.5-10 cm, distinctly crenate, obtuse, cordate, petiole 3-30 cm; cauline smaller with shorter petioles. Floral leaves subsessile to sessile, similar to cauline leaves, lowest pair longer and the rest shorter than verticillasters. Verticillasters +- approximate above, 1-2 remote below, c. 2-5 cm distant, 10-15-flowered. Bracteoles lanceolate, 4-15 mm, herbaceous with spinescent tip. Calyx 11-17 mm; teeth +- equal, triangular-subulate, 1/2 x calyx tube, spinescent tipped. Corolla purplish-pink, 30-35 mm. Nutlets 3.5-4 x 2.5-3 mm. Fl. 6-9. Lush meadows, rocky slopes, edge of Pinus forest mixed with Fagus scrub, 1600-3300 m.

### **S. officinalis (Betony)**

FBI - Sparingly hairy perennial 15-60 cm, with a short woody rhizome, a well-marked basal rosette of lvs, and erect, sparsely lfy stems, simple or somewhat branched below. Lf-blades 3-7cm, oblong or ovate-oblong, cordate at base, obtuse, coarsely crenate; the basal numerous on very long (to 7 cm) petioles; cauline 2-4 pairs, distant, several times their own length apart; petioles becoming shorter upwards, the uppermost subsessile. Infl. often interrupted below. Bracts ovate or lanceolate, entire; the lowest pair crenate-serrate, rather lf-like. Bracteoles lanceolate, aristate, about equalling the calyx. Calyx 7-9 mm, the teeth triangular-lanceolate, aristate. Corolla c.15 mm, bright reddish-purple, the tube without or with scattered hairs within, longer than the calyx; upper lip nearly flat. Fl. 6-9. Pollinated mainly by bees; protandrous or homogamous. Native. Open woods, hedgebanks, grassland and heaths, usually on the lighter soils; ascending to 460 m.

FEU - Erect, subglabrous to densely hirsute perennial 15-100 cm. Leaves 30-120 x 15-50 mm, oblong to ovate-oblong, cordate at base, coarsely crenate or crenate-dentate. Verticillasters in a dense spike, sometimes interrupted below. Calyx 5-9(12) mm; teeth 1/4-3/4 as long as tube. Corolla 12-18 mm, bright reddish-purple, rarely pink or white; tube exceeding calyx; upper lip entire.  $2n = 16$ .

### **S. palustris (Marsh Woundwort)**

FBI - Perennial herb with long creeping rhizome producing small tubers at the apex in autumn, green, hairy, almost hispid, odourless. Stems 40-100cm, simple or slightly branched, hollow. Lvs 5-12cm, oblong-lanceolate or linear-lanceolate, acute, rounded or subcordate at base, crenate-serrate, the lower very shortly petiolate (petiole 5 mm or less), the upper sessile. Whorls c. 6-fld, forming a terminal spike, dense above, interrupted below. Lower bracts resembling the lvs but smaller, the upper small, shorter than the fls, entire. Bracteoles linear, scarcely reaching the base of the calyx. Calyx c.8 mm, tubular-campanulate, pilose, eglandular or sparingly glandular, the teeth triangular-subulate, more than half as long as the tube. Corolla 12-15 mm, dull purple, pubescent outside. Fl. 7-9. Pollinated mainly by bees; protandrous. Native. Common by streams and ditches and in swamps and fens, sometimes also in arable land; ascending to 460 m.

FEU - Erect, sparsely to densely hairy, usually eglandular perennial 30-120 cm. Leaves 30-120 x 7-35 mm, oblong or oblong-lanceolate, acute, cordate at base, crenate, appressed-pubescent, the lower shortly petiolate, the upper sessile. Verticillasters usually 4- to 10-flowered, the upper crowded, the lower distant. Calyx 6-8 mm, usually eglandular; teeth equal, as long as or slightly shorter than tube. Corolla (11)12-15 mm, purple, puberulent; upper lip 3-4 mm; lower lip 5-7 mm.. Damp places, and as a weed in cultivated fields.

### **S. recta (Perennial Yellow Woundwort)**

FEU - Erect or ascending, subglabrous to sparsely hirsute, usually eglandular perennial 15-100 cm. Leaves 10-80 x 1-20 mm, the lower oblong to ovate, rounded or cuneate at base, the upper linear to ovate-oblong, glabrous to hirsute, entire to crenate-serrate. Verticillasters 6- to 16-flowered, crowded or the lower distant. Calyx 5-9(11)mm; teeth shorter than tube. Corolla 15-20 mm, pale yellow, pubescent; upper lip 4-7 mm; lower lip 5-12 mm. Dry places.

A very variable species containing a large number of subordinate taxa. The following subspecies appear to be the most widespread and distinct of these, but many local populations showing different combinations of characters also occur.

(a) Subsp. *recta*: Middle and upper leaves 20-80 x 5-20 mm, oblong to elliptical or oblanceolate, crenate or crenate-serrate. Calyx 5-7 mm, eglandular; teeth more or less equal. Lower lip of corolla 5-7 mm. Throughout the range of the species. (b) Subsp. *labiosa* ... (c) Subsp. *subcrenata* ...

### **S. sylvatica (Hedge Woundwort)**

FBI - Perennial herb with long creeping rhizome not producing tubers, green, almost hispid, foetid when bruised. Stems 30-100 cm, often branched, solid. Lf-blades 4-9 cm, ovate, acuminate, cordate at base, coarsely crenate-serrate, all petiolate (petioles 1.5-7 cm). Whorls c. 6-fld, forming an interrupted terminal spike. Bracts shortly petiolate, the lower ovate-lanceolate, toothed, the upper lanceolate, entire. Bracteoles linear, scarcely reaching the base of the calyx. Calyx c.7 mm, campanulate, hairy and glandular, the teeth triangular-lanceolate, more than half as long as the tube. Corolla 13-15 mm, dull reddish-purple with white markings, pubescent outside. Fl. 7-8, pollinated by bees; protandrous. Native. Common in woods, hedgebanks and shady waste places on the richer soils; ascending to 460m.

FEU - Erect, hirsute and glandular-pubescent perennial 30-120 cm. Leaves 40-140 x 20-80 mm, cordate-ovate, acute, crenate-serrate, sparsely hirsute, all petiolate. Verticillasters (2)6(8)-flowered, more or less crowded. Calyx 6-8 mm, glandular-pubescent; teeth equal, as long as or slightly shorter than tube. Corolla 13-18 mm, dull reddish-purple with white markings, rarely white or pale pink, puberulent; upper lip 4-5 mm; lower lip 6-7 mm. Shady places.

## **Taxonomic Names**

Src: [BSBI Maps/List](#)

*Betonica* L.

*Betonica officinalis* L.

*Stachys* L.

*Stachys alpina* L. Limestone Woundwort

*Stachys annua* (L.) L. Annual Yellow-woundwort

*Stachys arvensis* (L.) L. Field Woundwort

*Stachys byzantina* K.Koch Lamb's-ear

*Stachys coccinea* Ortega

*Stachys cretica* L.

*Stachys germanica* L. Downy Woundwort

*Stachys grandiflora* Host

*Stachys heraclea* All.

*Stachys macrantha* (K.Koch) Stearn

*Stachys ocymastrum* (L.) Briq.

*Stachys palustris* L. Marsh Woundwort

*Stachys palustris* x *sylvatica* = *S. x ambigua* Sm. Hybrid Woundwort

*Stachys recta* L. Perennial Yellow-woundwort

*Stachys sylvatica* L. Hedge Woundwort

*Stachys sylvatica* var. *subsericea* Grog.

*Stachys sylvatica* var. *sylvatica*

## **References & Further Reading**

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