## 2.3

## The Voynich Plants and their Names. Folio 45r-96v

Version 2, october 15th 2022

Siv Bugge Vatne

betechegh

TH: beet, betis= Atriplex hortensis MEC: Thegh = stem

olly &c.cy/oll&s/olly&ss oke Rie/okRe/okdaz wk(e rie/re/thegh ?hawke or woke writhe/wre/thegh ?Hawk or wake wreath/wort/stalk

4 Moyelo ko3Ro togh-ro tough-?wreo tough/viscous-?cover

5 Herof Heg kloz (kl)e klogh kle ?Clogh cle/clei ?cliff-root/clay

6 8ay8aw3 3da3dawn theghdewn theghed wyn stalked vine



F45r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Atriplex prostrata. Lindman, C.A.M., Bilder ur Nordens Flora



Photo source: Pedicularis palustris. By Jcomeau ictx - Own work, CC BY-SA 3.0

The first name in this folio is *beitethegh*. *Beet* and *betis* are registered names for Atriplex hortensis, and *thegh* means *stalk* (MEC). Atriplex hortensis has only one stalk growing from the root. But there is another Atriplex that have a more similar root. It is **spear leaved orach**, **Artiplex prostrata**. It has a tap root that gives rise to several stalks. The leaves are also strikingly similar. They are depicted with the same variation of colors of green and light brown as in the illustration by Lindman. The flowers and stalks are dark red or purple. The other names in this folio are not related to any registered names of Atiplex (TH/MEC). The very last word can be a description or a name, *theghdewn*. Thegh was found in the first name *beite-thegh*. *Thegh* was translated to *stalk*. I believe *theghdewn* is related to *theghed-wyn*, meaning *stalked vine*. Spear leaved orach may have been called a stalked vine because it is both prostrate and stalked. Sometimes it ascends up to one meter tall.



A. prostrata: By the sea, Saline marshes, sea beaches and strands, rarely inland along waste areas and railroads. sand, gravel, loam and clay soils

orare
arere
hare-ere

TH: *Hare-ear* = Hylotelephium telephium

2 Reserves
toglie
tohlie
togh-lief
viscous (succulent?)-leaf

3 frago(rd) fRogo(rd) f-roh-ord fei/vei-?ruff-wort enchanted/roadrogh (?land) wort

4 40 flog crowd go koz lown go kach lown go cachie loven go catch love

## 5 offeecod etRior eit-riwr eite-?wrei-wr wealth/moneyprophesy-wort

Associated with the modern name: witch's moneybag

TH: *peniwort* = Hylotelephium telephium



F45v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Hylotelephium telephium. Fuchs, L., New Kreüterbuch (1543)



Photo source: Hylotelephium telephium. Bernd Haynold - Self-photographed, CC BY-SA 3.0

This herb was identified by the name *orere*. I associate it with *hare-ear*, a registered name for **orpine**, **Hylotelephium telephium** (TH). Orpine matches the illustration well. It has sessile leaves with wavy margins spread along the stalk. The root has several stalks growing from it. Orpine spreads fast by root, and propagation can be from root division. I believe this is symbolized by drawing the root long and with many cuts. Historically orpine was used for love-divination. The second paragraph starts with: *Go kach lown*. I believe it is related to *go cachie loven*, meaning *go catch love* (MEC). The third paragraph gives the herb the name *eit-riwr*. I believe it can be related to *eite-wrei-wr*, meaning *wealth/money prophesy wort*. Both modern and medieval vernacular names for orpine can be associated with this. It was called *peniwort*, and is now called *witch's moneybag*.

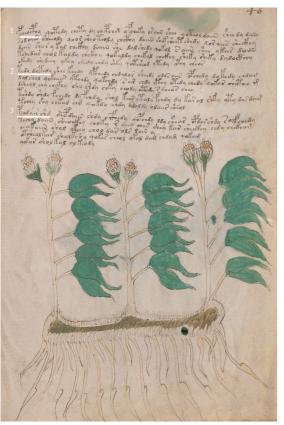


Sandy to gravelly soils of moderate to low fertility, part shade, sun; disturbed soil; roadsides, old fields, waste places, ditches, gardens, swamp margins, woodland.

Leco#1 blio(bl)e plioble pile-belle pile bell

> MEC: Pile-wort = Ficaria verna

- 2 11cog 8911cog ki(sd)e dekide kiste theikide chiste thacched chest covering
- 3 4 E- 3 and 2- 3 bldaur Rd pldeur rd piled-wr?red piled-wort ?red



F46r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Ficaria verna, Fuchs, L., New Kreüterbuch (1543)



Photo source: Ficaria verna. 4028mdk09 - Own work, CC BY-SA 3.0

The first name of this herb is *pilioble*. I believe it can be related to *pile-belle*. *Pile* is found in *pile-wort*, a registered vernacular name for **pilewort**, **Ficaria verna** (MEC). *Pil* can be read in the sense of hemorrhoids, as the plant has been used to treat piles (hemorrhoids). The illustration matches pilewort. It shows yellow flowers and a root that gives rise to several stalks. If this is a pilewort, there are two strange things. The leaves are separated at the wrong side and the stalk divides into to flowers. The first may be an error. The second may be a way to illustrate that the plant carries several flowers. The petals may be too small to color, or it may be a subspecies with white sepals like the cultivar Alba group. The root has a striking similarity. Pilewort grows in clumps of three to four stems. It has two types of roots. One of them forms a dense cluster of thick, pale-colored elongated tubers. The other surrounds it by patches of short, fibrous roots. Pilewort spreads by runners to produce extensive carpets of plants. The second name in this folio can be associated with this, kiste thekide. It can be related to kiste thacched, translated to chest covering (MEC). Dioscorides writes that "a decoction of it gargled with honey powerfully purges the head, and purges all things out of the chest."



bode hRi(sd) bode h-rist bode hie-rist "bode" hue virtuous

TH: Bodewine, goldesbothun, ?budel, budent = Chrysanthemum segetum.

MEC: *Hie/hue* = hue



F46v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Top: Glebionis segetum (as syn. Chrysanthemum leucanthemum) plate 10 in: C.A.M Lindman: Bilder ur Nordens Flora first edition: (1901-1905) supp. edition (1917-1926. Bottom: Tancetum parthenium, Köhler, F.E., Köhler's Medizinal Pflanzen (1883-1914).



Photo source: Glebionis segetu by Tigerente - Own work, CC BY 2.5 Bottom: Tancetum parthenium by By 4028mdk09 - Own work, CC BY-SA 3.0

Bode h-rist is the first name of this herb. Bode, bothun and bud are found in the registered names of corn marigold, Chrysanthemum segethum. H have formerly been associated with hie, meaning hue (MEC). It is found in the names of plants that are used as a dye. Corn marigold can be used to produce a yellow dye. The last part of the plant name, rist, means virtuous. The illustration is interesting. The root looks like a winged symbol. The circling stalk looks like a symbol too. The leaves are long, lobed and toothed. They are more complicated than the leaves of corn marigold. It may be an indication that this is a wrong identification. The root can be a branched taproot. But I am not really satisfied with the match neither the leaves nor the root has with corn marigold. It looks more like another Chrysanthemum, feverfew, Tanacetum (Chrysanthemum) parthenium. I do not find any match in the registered names for feverfew. Registered names amongst others are feverfew, fwetherefoy, holywort, erthegalle, fefyrfoy, feverfoile, aldwort, witwort, centaurea minor, erigalle, vethervoy, feyesfoye, hersgal and ?poseire. Taking a closer look at the flowers in the photo above of fevefew they look very much like the illustrated herb. The root and leaves are also matching better. Feverfew was being grown in gardens for medicinal use by 995

f47r Laurus nobilis / Laurel Laurbær

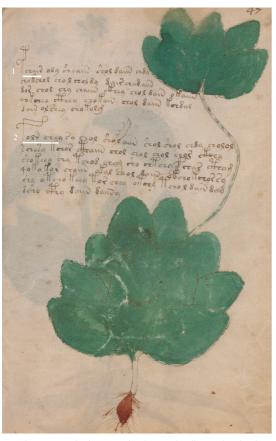
laur leur laur laurel

TH: *Laur* = Laurus nobilis

2 Pox crcs foar lie ?fogr lie ?foge-lief ?catarrh leaf or ?fónger-lief ?helper/protector-leaf

MEC: foge = catarrh

Laurel oil has been used against catarrh



F47r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Laurus nobilis. Flora von Deutschland, Österreich und der Schweiz, (1885).



Photo source: Laurus nobilis. Giancarlodessi, CC BY-SA 3.0

The first name of this herb is *leur*. It is close to the registered vernacular name *laur*, used for *laurel*, *Laurus nobilis* (TH/MEC). The shape of the leaves matches. I have found no pictures of the root. The shape of it may indicate a growth from the fruit stone. The illustration may show the propagation of laurel. The lower plant can be planted by seed and the upper plant propagated by layering. The second name is *fohr lie*. It is either related *fónger lief*, meaning *helper leaf* (MEC), or related to *foge lief*, meaning *catarrh leaf*. The Roman naturalist Pliny the Elder listed laurel oil to treat catarrh. Dioscorides writes about laurel: "Both are warming and softening, as a result a decoction of them is good as a hip bath for disorders of the vulva and bladder.... The bark of the root breaks stones [kidney, urinary]"(D).



Woodland and scrub and on sea-cliffs, dunes, roadsides and river banks.

- bRiok
  b(-)riok
  ?bi rók
  ?by/be smoke/
  mist/rock/cliff
- 2 & ecces con dRme Re
  th rne re
  the renne wre
  Running/rhizome
  wort
- 3 Feesawo blodawn bladewn bladewyne

TH: *Bladewyne* = Gentiana



F47v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Gentiana purpurea. Hayne, F.G., Getreue Darstellung und Beschreibung der in der Arzneykunde gebräuchlichen Gewächse (1805-1846).



Photo source: Gentiana verna. By Opioła Jerzy - Own work, CC BY 2.5.

The name that identifies this herb, is the first word in the second paragraph, *bladewn*. I believe it is related to *bladewyne*, a registered name for **gentian**, **Gentiana**. I do not know exactly which kind of gentian this illustration shows. It is interesting to look at the root, and the small details drawn in red. There are some gentian species depicted in a similar way. Particularly interesting is the small shoots from the root. **Gentiana asclepiadea** or **Gentiana purpurea** has those snall root shoots. By now I believe Gentiana purpurea is the most similar to the illustration. It has a rosette of elliptical leaves in addition to two leaves higher up on the stalk. The flower is brownish purple. Gentiana purpurea grows wild only in mountain areas in Europe. Gentiana purpurea was one of the most important exported plants from Norway in the Middle Ages. It was thought to cure everything.

### Garden herb? or imported

G. asclepiadea cultivated in Britain by 1629 pneumonante: native verna: native amarella: native gentianella anglica: native camprestis: native cilita: native

28and Rdawn rdewn red-heowen red-dyestuffs

> Red: The seed is a red dve TH: Ruta agrestis = Peganumharmala (not vernacular name)

- 2 offeren etter 8ag oblie (kl)e daz oblie tle thegh o blíe tille thegh o blessed cultivation/cure stalk
- 3 22c08and Riodawn riwdewn rewe the heowen rue the dyestuffs

TH: Wild rue, rwe, rewe, pety rue, wode rue = Peganum harmala



F48r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.





Photo source: By MurielBendel - Own work, CC BY-SA 4.0

This herb was identified by the sixth word in the first paragraph, riwthewn. The first part of it, riw, reminds of rewe. Rewe is a registered name for wild rue, Peganum harmala. There are small spaces in the word riwthewn. Following these small gaps, the word can be divided into riw th ewn. It may be related to rewe the heowen, meaning rue the dyestuff. A red dye can be extracted from the seeds of wild rue, or yellow when the seeds are extracted in water. The first name in this folio is rdewn. It may be related to red-heowen, meaning red dyestuff. The illustration matches wild rue quite good. It has white flowers, thin palmate Garden herb

leaves and a taproot with branches.

1 Feecosers bliodle bliwdle bi lavendule be lavender

> TH: Lavande Lavandre, lavendule = Lavandula officinalis and latifolia

2 scress frees, dRide flide
d ride flide
the ride flithe
that let rid
intestinal worm/
?flies/flying isects

See f40r French lavender with the same text

4 office 8 eres etimde Rie eitnde rie itende writhe burning incese wreath





F48v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Bonelli, G., Hortus Romanus juxta Systema Tournefortianum (1772-1793)



Photo source: By S. Rae from Scotland, UK - Lavandula canariensis, CC BY 2.0

This herb was identified by some words and phrases that are similar to those in f40r. The herb in f40r is identified as French lavender. The word that is found in both this folio and f40r is *ster*. *Stér* means to *burn incense*. *Ster* is found as the last part of the first word in paragraph two. Another similarity is *ride flithe*, also found in f40r. It may be a variation or an error of *ride flize*, meaning *rid flies/fly-ing insects*. Lavender was burned to get a good smell and to get rid of flying insects. The first word in this page is *liwdle*. It is not very far from *lavendule*, a registered name for Lavandula officinalis and latifolia. This is neither of those lavenders. But the herb illustrated has similarities to the **Canary island lavender**, **Lavandula canariensis**. It has bipinnate leaves reminding of ferns. Its branched stalk is green to light brown. It has several racemes with violet flowers. Lavender may form clumps and reproduce by root cuttings. The illustration seems to depict two crossing herbs. But looking closer at it, they are not drawn as separate plants. They are connected. Other similarities between this page and f40r is that French lavender in f40r is called *tioder (tinder)*, while this herb is called *titnde (itende)*. I believe they both have something to with burning incense as *tinder* means *flammable material* and *itende* means *burning*.

### Garden herb

First described by Philip Miller in 1768.

209 Ro3 rogh rove

Swedish: röd hundrove = Bryonica dioica French: Rave de serpent = Bryonica dioica

2 202 209 Ror Ro3 rar-rogh rar/rear-rove

lightcolored/small/ raise-rove 2024 E03 Rorblor

rar-belwr rar/rear-bel-wr light-colored bell wort

Light-colored = white bryony?

408ans bodawn bodewn

bodewyn

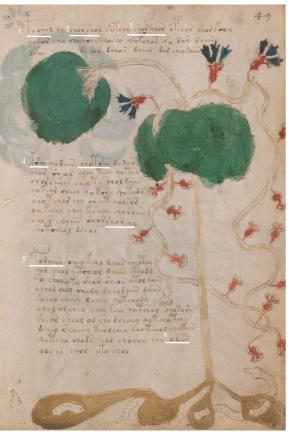
TH: bodewyn = ?Convolvulus arvensis

See f17vv rough bindweed, called beidewyn.

See f54v. field bindweed, called belewyn.

orns orwn wrwm worm worm

> See the worm in the root, and the modern name snakeweeed.



F49r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Bryonia alba/dioica. Fuchs, L., New Kreüterbuch (1543) New Kreüterbuch (Fuchs)



This herb is most likely the climbing *snakeweed*, *Bryonia dioica* or *alba*. I found no registered names for snakeweed (MEC/TH), but first name in the third paragraph is **bodewyn**. **Bodewyn** is a registered name for bindweed. I do not believe this is a bindweed, but snakeweed may have been associated with it as they both are climbing weeds. There are two bindweeds in the manuscript. The first is rough bindweed, in f17v, called beidewn (beide-vine). the second is field bindweed, in f54v, called belewn (belle-vine). I conclude with snakeweed in this page because it matches the illustration well. Sankeweed has small white or blue flowers, and red berries. The root is thick. In 1792, the botanist Carl Fredrik Hoffberg wrote enthusiastically about Bryonia alba: "A deep hole cut into the roots after they had been cut off evenly at ground level was filled with juice after a day or so. This juice cured oedema and was employed in the treatment of intestinal worms, convulsions and headaches." Both the modern English name snakeweed, and the botanist's story makes sense with the illustration. **Rogh** is the first name of this plant. There are related name for snakeweed in Sweedish, **röd hundrova**, and in French, Rave de serpent (Snake Root).



Well-drained, often base-rich, soils in hedgerows, scrub, woodland borders, and on rough and waste ground

- 1 202 209 Ror Roz rar rogh rar rogh ?rare hairy
- 2 to Horse (bl)o tlo3 blo tilog blo ?tilage dark ?cultivation

MEC: Til = tocultivate

- 3 creeters li(fl)e liflie líflí vivid/lifegiving
- 4 4 100000 flolor flolor flod láver "flo" medicinal wash

TH: Flos siriacus = Marsh mallow, Althaea officinalis



F49v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University



Photo source: Alcea rosea. Köhler's Medizinal-Pflanzen, 1897



Photo source: Alcea rosea. Buendia22 - Own work, CC BY-SA 4.0

This herb was identified by the name liftie. I found a word close to lif in eorme-leaf registered for high mallow, Malva sylvestris. I do not believe this is the right interpretation of *liftie*. Liftie may be related to lifti meaning vivid or lif giving. I do believe the herb in this folio is some kind of Malva or Alcea. They have similar flowers and long stalks with rounded leaves. A single stalks grow from the root. The seeds look like the illustrated root. As they reproduce freely from seeds, it makes sense that it is illustrated like this. It is interesting that the leaves are cut on the lower stalk. This is done on some Malvaeas to prevent them from being attacked by the rust disease Puccinia malvacearum. Of the plants that match the illustration, Puccinia malvacearum attacks only Alcea and Malva. I believe, as the plant is cut, and it is called blo, meaning dark, that it may be a dark cultivated Alcea rosea. It is also interesting that there is a riddle to the left in this folio. First it is divided to f arei o t siporei - a siporei o th eite. I interpret this as fay arai of té siphre - a siphre of the eite. it can be translated word by word to add the sequence of this number - a number of the wealth (MEC). If adding 1+2+3+4+5 one gets 15. I do not know how it was in the Middle Ages, but 15 is today considered an extremely lucky number, associated with wealth.

Alcea roesa = Garden herb Malva sylvestris = archephyte in Great Britain: roadsides, waste ground and field-borders, often near settlements, occasionally on sea-cliffs.

1 2002 Rior rior ?ri/wri-wr ache/prophesy wort

2 ogtar? o3taur ohteur houde-wr

> TH: houderugresse, selfhede = Pimpinella Sanguisorba/ Sanguisorba officinalis

3 oglices cectes oʒtle l(tl)e ohtle ltle houte-lef litle

MEC: Litle burnet = Sanguisorba minor

It is uncertain if little is part of the name



F50r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Sanguisorba minor. Curtis, W., Flora Londinensis (1775-1798)



The first name in this page is *rior*. I first interpreted it to be related to *wre-or*, meaning *wort gold* (MEC). It led me to the herb Sanguisorba registered as gold-wort (TH). I do not hold on to that interpretation, but I hold on to Sanguisorba as there is a second name, ohteur, also leading to Sanguisorba. The first part of *ohteur* may be related to *houde* or *hede* in the registered name *houdergresse* and *selfhede*, they were used for Pinpernella Sanguisorba and Sanguisorba officinalis (TH). The word little is also found several places in the text. Little is a part of the registered name litle burnet, used for Sanguisorba minor (TH). But litle is not necessary a part of the plant name. Litle is also a verb meaning to reduce. Based on the names and the illustration I believe this is a kind of burnet, Sanguisorba. The flower of the herb in this folio has been drawn in the same way as the flower of f40v, with similar shapes as in the upper left corner of the rosette map. The leaves are a bit strange and the stalk should have been red. The root matches very well.

> S. officinalis (map): A variety of soil types, generally infertile, well-drained soils, including weakly saline and weakly alkaline or acidic



S. minor: almost confined to dry. infertile grassland on chalk and limestone, but also occurring on boulder-clay

1 Hery so year kle do hdar klei tho hther calei tho hether caley the Lathyrus

Modern english: calei pea = Lathyrus hirsutus

TH: *Hether*; *hathere* = Lathyrus



F50v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Lathyrus Linifolius. Smith, J.E., English botany, or coloured figures of British plants, ed. 3, vol. 3 (1864).



Photo source: Lathyrus linifolius. By Meneerke bloem - Own work, CC BY-SA 3.0.

This illustration is interesting beacuse it shows how the illustrator works. It looks like one large blue flower, but there are several pedicels leading up to the flower. because of this I believe the large shape is made up by several smaller flowers. The first name in this folio is *klei tho hther*. This name can be related to *calei the hether*. *Hether* is a registered name for Lathyrus, and *calei* is a modern English name for Lathyrus hirsutus. I believe this is some kind of vetchling. Good candidates are **Caley pea, Lathyrus hirsutus** or **heath pea, Lathyrus linifolius**. The illustration does not really have the leaves of a vetchling, but the flowers have similarities.



L. hirsutus: Thickets, disturbed waste grounds, roadsides, fields, savannahs, creekbeds, wet meadows, and along railroad tracks.

1 Herogen kRozdle k-rogdle K-rugh\*-lef K-prickly-leaf

> \*See f11v: d is put between g and l so bugle is written bugdle

MEC: rogh= prickly, sharp-pointed

l lecesand offices, klodeawn obmde glodewn opmde glod-heuen o pé-mede gold-color a "pe"-meadow



F51r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Kerner, J.S., Abbildungen aller ökonomischen Pflanzen (1786-



Photo source: By Jeantosti, CC BY-SA 3.0,

This is one of the last herbs I figured out. When identified, it becomes obvious what the strange margin drawn in the middle of the leaf is. It is the characteristic spines along the middle vein of the leaves of **prickly lettuce**, **Lactuca serriola**. The specific shape of the leaves also makes sense when comparing them to prickly lettuce. The first name ends with  $c_{0}$  (le) is found as a prefix in many plant names, and I believe it is related to *lef*, meaning *leaf*. I believe that the important part of plants with *leaf* in their name are the leaves. For example, is another lettuce called *sewn-le* in f22v. The flowers in the illustration in this page have the appearance of a yellow ray flowers. The lettuces have yellow ray flowers. Prickly lettuce has the right shape of the leaves. It has a spine along the middle vain. The yellow flowers are topping large oblong bracts. It also has a tap root and one stalk rising from it. The first name in this folio is *roghdle*. Associated with prickly lettuce it makes sense. It may be related *rogh-lef*, meaning *prickly leaf* (MEC). The *d* in *roghdlei*, can have the same dialectical cause as the *d* in *bugdle*, a name for *bugle*. See f11v.



Roadsides, waste ground, gravel-pits and sea walls, newly turned soil. Occasionally in semi-natural habitats, such as shingle banks and sand dunes

1 2089 Rode rode rude/rode

TH: *Rude, rode* = ?Symphytum tuberosum

3 Losand Rodawn

rodewn rude/rode-wan "rude"-whitish/ lusterless

TH: *Rude, rode* = ?Symphytum tuberosum

3 Heros, they klode (kl)e klode kle glode clé gold claw/?root

TH: *qwhite golde* = ?Symphytum tuberosum



F50v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Symphtum tuberosum. English botany. Sowerby, James; Boswell, John T. (John Thomas); Lankester, Mrs. (Phebe); Sowerby, James de Carle; Salter, John William; Sowerby, John E. (John Edward) (1867).



Photo source: Symphtum tuberosum. Benjamin Zwittnig - CC BY 2.5

The name of this herb is *rode* or *rude*. *Rode* and *rude* are names associated with **tuberous comfrey**, **Symphytum Tuberosum** (TH). It matches the illustration. It has numerous small white bells. The leaves are lanceolate. From the tuberous root grows one single stalk. The identification is further confirmed by the name *klode kle*. I believe it is related to *glod clé* and means *gold claw (?root)*. *Gold* is found in the registered name qwhite golde. it is associated with tuberous comfrey (TH). A vernacular common name for tuberous comfrey is 'knitbone'. it reveals the healing role that it had in botanical medicine throughout the ages. In these traditional cures the leaves vere used to speed up the healing of broken bones. I wonder if this is reflected in the way the leaves are drawn in the illustration. They are forming loops.



Damp woodland, ditches, stream and river banks, where it occurs in both shaded and open situations. grows well in heavy clay soil.

1 Hollerten kdotl(fl)e kthutlfle k-thote/dút-líflí k spring/delight life-giving

> MEC: *lifli* = life-giving, vigorous, vivid theote = spring. torrent  $d\acute{u}t = delight$

2 #16 e(bl)to eblto ?é-bel-to ?water-bell-toe



F52r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Sturm, J., Sturm, J.W., Deutschlands flora (1798-1855)



Photo source: Uoaei1 - Own work, CC BY-SA 4.0

This identification is based on morphology. The names give sense after I found a canditat that matched. The candidate is bogbean, Menyanthes trifoliate. Bogbean is strangely not registered. In some parts of Great Britain been one of the most prized herbs of all in folk medicine. The most peculiar about this illustration is the hairy petals of the flower. There are not many flowers with this characteristic. It matches the fringy petals of bogbean. Bogbrean's leaves are divided in three. The root is thick and long and several plants grow from it. The flower of bogbean is often pink on the outside and whitish on the inside. The pink color may have been interpreted light violet, resulting in a shade of blue in the illustration. The first name kthotlfle, may be interpreted k-thote-lifli. It can be translated to k spring life-giving. It's last part, lfle, is also used in f49v, there spelled *lflie*. In f49v the herb is identified as Alcea or Malva. Bogbean has been a substitute for hops in beer (FM). The leaves are intensely bitter. It has been used to revitalize the system and resolve digestive problems, in addition to treat numerous health problems (FM).



Shallow edge of lakes, pools or slow-flowing rivers, or in swamps, flushes or dune-slacks

1 4500 blor plwr pil-wr pile-wort

2 1(b1)o3 l plogh elle-pil-hog "elle" arrow hog

> Hog as in the modern English name hog's fennel. MEC: Hog = swine TH: swynysfynel, swynegrese = Peucedanum officinale

See f96r, carrot is called lmor (ellemor): Peucedanum officinale = carrot family

Lamo (bl)awun plewum píle-wurm pile-worm

> TH: Worm-seed = Peucedanum officinale

Percog blio3 pliogh pil-hog arrow-hog

Logond Rozown roghown rogh-hound hairy/sharp pointed dog

> TH: dog-fenel, hundesfennel, ?hondesdil = Peucedanum officinale



F52v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Peucedanum officinale. Bonelli, G., Hortus Romanus juxta, vol 5, Systema Tournefortianum (1772-1793).



This herb was identified by the third word in the first paragraph, plewum. I believe it is related to pile-wurm and means arrow worm (MEC). There is a plant registered with the name worm-seed. It is hog's fennel, peucedanum officinale (TH). It matches the illustration in the way that it has a bushy, radiating mass of long-petioled leaves. Pl is also found in the first name in this folio, plwr. It can be related to *pil-wr* and mean *arrow wort* (MEC). The word *pil* may refer to the shape of the long thin leaves. The second name is *lplog*. I believe pl is found in this name too. It may be divided to l-pl-og, and be read elle-pil-hog. Elle si found in the name of daucus carota in f96r. Hog's fennel is in the carrot family. *Hog* is found in the modern English name *hog's fennel*. *Hog* also means *swine* (MEC) and a registered name for hog's fennel is swynysfynel. The fourth name is pliog, another variation of pil-hog. The fifth name is roghown. This name can be read *rogh-hound*. It means *hairy hound*. Hound is also found in registered names for hog's fennel; dog-fenel, hundesfennel, ?houndesdil (TH). Hog's fennel is a rare plant today, occurring only in certain localities in the counties of Essex and Kent. It was formerly also found near the town of Shoreham-by-Sea in the county of West Sussex.



Rough grassland, clavey banks and cliffs near the sea.

f53r Ilex aquifolium / Holly Kristtorn

- Hoses coeffees, todo(rd) lo(kl)ode tothwrt lo klode tooth-wrt lo ?clóde tooth-wort indeed clawed
- 2 of 19 809 8ດດວ o ke dog daun a ke dag/thogh theun a kei dagge/thevethorn a ?Christ/key spiky/bush thorn

TH: Theve-thorn + MEC: (SWM) theove-= The Holly MEC: Dagge: Ornamental points or incisions on the edges of a garment + A dagger, or some other pointed implement.



F53r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Ilex aquifolium. Miller, P., Figures of the most beautiful, useful and uncommon plants, described in the gardeners' dictionary, Vol1 (1755-1760).



Photo source: Ilex aquifolium. H. Zell - Own work, CC BY-SA 3.0

This was one of the first herbs I identified. It was the word *dagh-theun* that caught my attention. *Daghe* means *dagger or some other pointed implement* (MEC). The leaves of the herb illustrated is indeed pointed. *Theun* may be related to *thorn*. When I found the herb name *theve-thorn* registered for *the* holy, Ilex aquifolium it made sense. *Theve* means *bush* (MEC), and it is possible that  $s_{0f}$  is a form of *theve*, not *daghe* as I first thought. The sound of *gh* is close to *v*, as it is the same sound that is pronounced *f* in for example modern English *tough*. The first words in the folio says *tothwrt lo klode*. I believe this means *tooth wort indeed clawed*. The holy is common in much of England, but its recorded use in folk medicine is very largely confined to central and southern England, and to one affliction only: chilblains (FM).



Found in most well-drained soils in scrub, hedges and woodland where it is often the dominant under-storey shrub.

## 1 Melovelog kRorRie k-rar-rie K-rar-writhe K seldom/light colored wreath

### Ho office, (bl)o ozkRie blo ohk-rie blod hawk-writhe blood/blue hawk-

# Rme rne ringe ring

wreath

# 4 Kiros, Miros, tRade kRiode te rede k-riode te rede K-reade this red K red

redeflour, rode, ruddis = Calendula officinalis

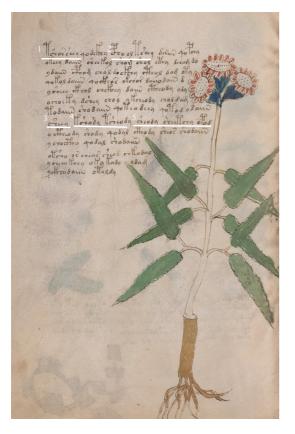
## 5 22089 22211239 of 08

Riode Rmkle obod riode rnkle obod red ring/ring-lef o bod red ring leaf of "bod"

TH: Wringinwort, bothel, bothon, elferingewort, rod = Bellis perennis, Symphytum officinalis, Chrysanthemum leucantemum/ segetum, ?Ajuga reptans, ?Symphythum tuberosum TH: Bodewen = corn marigold

Norwegian: ringblomst = Calendula

## f53v ?Pilosella aurantiaca or some kind of calendula / ?orange hawk bit or some kind of marigold







F53v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.

Photo source: Calandulas. Gottorfer Codex (1649-1659)

Photo Source: Pilosella aurantiaca. SOeder, G.C., Flora Danica (1761-1861)

The flowers of this herb look like Pilosella aurantiaca, except from the placement of the leaves and the missing hairs. The three flowers placed close at the top match well. It aslo has dark-colored bracts and the shape of the leaves are similar. The root is also not bad, except that it probably would have been drawn as a runner if this is Pilosella aurantiaca. There are also some names leading to Pilosella like *ohk-rie*, that can be interpret *hawk-writhe*. It means *hawk wreath*. Some pilosellas are called hawkweed in modern English. There are some characteristics of the illustration that do not match Pilosella aurantiaca. Ae mentioned, the root is a runner. In addition the leaves should have been drawn as a rosette. The names *rne* and *riode rnkle obod* is interesting. I interpret them to be related to *ringe* and *ring-lef of bod*. It means *ring* and *red ring-leaf of bod* (MEC). There are some registered names that can be associated with this. The ray flowers Bellis perennis and Chrysanthemum leucantemum/segetum are registered under the same names: *Wringingwort*, *elfringewort*, *bothel* and *rod*. Corn marigold was called *bodewen*, in f46v it is called *bode*. The illustration matches neither of them. There is a Calendula in f8v, it is called *beidewn*. There are different kinds of orange Calendulas that matchthis illustration. Calendula officinalis is registered called *rode*, *ruddis* and *redeflour*. In name four and five this herb is called *rede* and *riode*.

bodawn

podewn

podyll-wen

"podyll"-lump

TH: *podyll* = Cirsium ssp.

- 2 Roday Roday rothegh rod-thegh red-stalk
- 3 Por ore tor ori tor wri tor(n-?wre thorn-?wort



F54r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.

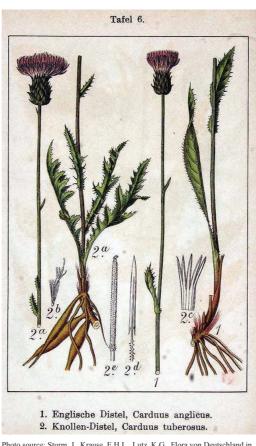


Photo source: Sturm, J., Krause, E.H.L., Lutz, K.G., Flora von Deutschland in Abbildungen nach der Natur. Zweite auflage (1900–1907)



Dr Mary Gillham Archive Project



Photo source: https://www.edimentals.com/blog/?page\_id=2461

This herb was one of the last herbs identified. Its first name **bodewn** misled me to think it was a ray flower. But the large scaly bracts, the leaves and the root did not really match any of them. It was finally identified by analyzing the illustration. The leaves in the illustration are hairy, jagged or thorned. The root full of tubers and it is a brush-like shape at the bottom of the stalk. It is one single stalk growing from the root. The bract seem to be thorned too as there is a dot in each bract. The color of the flower is reddish and white underneath. There are numerous herbs with scaly bracts, like Centaurea, Carduus and Cynaria. The only one I found with a tuberous root was **tuberous thistle**, **Cirsium tuberosum (Carduus tuberosus)**. It matches very well with the analysis above and it matches also the name. A registered name for Cirsium ssp. is **poddyl** (TH). The first part of name I thought was **bodewn**, can be read **pod**. The first name of this herb will then be **pode-wen**. The last part of the name, **wen**, can mean lump (MEC). Tuberous thistle has today two main areas in Wiltshire and Glamorgan.



Damp grassland on calcareous soils old chalk and limestone grassland, often on slopes with a N. or N.W. aspect, and sometimes occurring in rank swards.

l fercosal bliodar bliwder bel-ew-dére bell-ivy-dear or belewe-dére Belly-harm

TH: anglice ivy = Convolvulus arvensis

2 Lecand (bl)maun

> belmeun bel-mórn or bell món bell-morning or

bell-devil

Modern english names: perennial morning glory, small-flowered morning glory

3 Lawn (bl)awn belewn bele-wyn bell-vine

TH: bodwyn, ?wodewynd, wethewynde, erthwynd = Convolvulus arvensis



F54v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Dioscorides, P., De materia medica (Codex Vindobonensis), 512, De materia medica (Codex Vindobonensis)



Photo source: Convolvulus arvensis. By Maja Dumat from Deutschland (Germany), CC BY 2.0

This herb was identified by the leaves in addition to the first part, **bl**, in the name **bliwder**. I believe **bl** is a syncope of **bell**, and it fits with the bell-shaped flowers in the drawing. There is an herb with bell flowers and spear-shaped leaves. It occasionally has a reddish stem and the root is bulbed. It is **field bindweed**, **Convolvulus arvensis**. The second part of the first name is **iw**. **Iw** is close to **ew**, a word for **ivy** (MEC). Field bindweed was called **anglice ivy** (TH). Field bindweed was also called **bodwyn** and **erthewynd**. **Wyn** means **vine**. **Wyn** is also found in another name in this text, **blewn**. It can be translated to **belle-wyn**, meaning **bell-vine**. The color of the flowers is blue and white in the illustration. The pink color may have ended up as blue in the illustration. Or, it may be a cultivar. The color looks like that of Convolvulus tricolor, though the leaves of C. tricolor are different than in the illustration.



Lawns, gardens, fields, clay banks, areas along roadsides. Primarily in disturbed areas

1 Fosand bodawn podewn pod-?heuen

TH: *podyll* = Delphinium consolida

2 Mccc807 klior klithwr ?k-lith-wr ?



F55r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Miller, P., Figures of the most beautiful, useful and uncommon plants, described in the gardeners' dictionary (1755-1760)



Photo source: By Palickap - Own work, CC BY-SA 4.0

It was hard to identify this herb, as the illustration is quite strange. The first part of the first word *podewn*, may be related to *poddyl*, in the same way as it did in f54r. *Podyll* is registered for both Circioum and for Delphinium consolide (TH). In this folio the illustration matches Delphinium quite well. The large red lump uner the flower can be a way to simplify a raceme of flowers. This kind of simplification is also found in f14r. Delphinium has deeply lobed leaves. The plant is topped with a raceme of numerous flowers, varying in color from purple and blue, to red, yellow, or white. There is a Delphinium with a matching root, **alpine delphinium**, **Delphinium elatum**. It has a large bulbed root with several stalks rising from it.

Garden plant

- Herce 8cz 89 tlmdl(sd)e tlmdlste tille-(error) with-liste cultivation-willow-light
- 2 ocean cetter oidaun l(tl)e widun litle wiðen litle willow little

MEC: with(e, withthin, chiefly early: wiðen = A tree of the genus Salix, a willow. TH: whythe = Salix viminalis

ollersollaw otldetaun wtldeteun watel-?(error) wiðen wattle-?willow



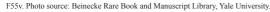




Photo source: Salix viminalis. Johann Georg Sturm (Painter: Jacob Sturm) - Fig. from book Deutschlands Flora in Abbildungen (1796)



Photo source: Salix viminalis. Willow - Own work, CC BY 2.5

Garden plant

The word that led to an identification of this plant is witheun. Whythy, with(e withene, within or widen are registered names for willow, Salix. The illustration matches willow with its brown stalk, lanceolate leaves and a shape that can remind of the catkins. The first name in the second paragraph, wilth, may also be associated with willow. I believe the first part, wtl, is related to watel. It means wattle. Willow was cultivated to be used as wattle. The word wtlth, may be divided into wtl-lth. A variation of lth is also found in the last part of the first name in the folio, tilmdlthe. What *Ith* and *Ithe* means is uncertain. It may be *lith*, meaning *light*, and describe the color. The first name *tilmdlthe*, may be interpreted tille-mith-lithe. Mith may be an error for with (willow), and the word may mean cultivation willow light(colored).

1 offers croedly oklaz llske okleh llskei ok legh//lech lilis-kei and field/ opening in woods//medicin lili's key

MEC:Lili = Theplant of the Madonna lily (Lilium candidum); other species of the genus Lilium, certain species of the genus Iris, plants mentioned in the Bible.

2 90000 elo(bl)e eiloble heile bele health/good fortune/?healing bell

16-oll klote klote k-lúte k bowed



F56r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Lilium martagon. Illustration by Fitch, Henry James Elwes A Monograph of the Genus Lilium, Tab. 23, (1877).



Photo source: Lilium martagon. Robert Flogaus-Faust - Own work, CC BY 4.0

Name number one in this folio is *okleh llskei*. The first part of the second word is *lls*. It is likely related to *lilis* and means *lilies* or lily's (MEC). The whole name okleh llskei, can be related to ok legh lilis-kei, meaning moreover field lili's key (MEC). Ok were often used to start sentences, meaning *morover*. The illustration shows a white root: it gives rise to one single stalk with many large flowers. This match *martagon lily, Lilium martagon*. The leaves are places differently. They are not drawn as a whorl growing directly from the stalk, but a whorl placed on leaf stalks.



Deciduous woods, scrub and mountain pasture, especially on limestone. usually occurring in small clumps near woodland edges or in coppiced woodland.

1 ercoll frog erco liok Roz lie liok rogh lie lich rogh lye/lief

> ?rough =rough land MEC: Rough = hairy. TH: Lichwale, lyewal = Lithospermum officinale

2 Los Log Rod Rie rod rie rod writhe red wreath

MEC: Réde-wale
= Lithospermum
arvense
A purple dye is
obtained from
the roots

3 ceolices lotle lotle

> TH: lityll wale, lyewal, lythewal, lyghwal = Lithospermum officinale



F56v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Smith, J.E., English botany, or coloured figures of British plants, ed. 3 [B] [J.E. Sowerby et al] (1863-1899)



Photo source: By Benjamin Zwittnig - http://www2.arnes.si/~bzwitt/flora/buglossoides purpurocaerulea.html, CC BY 2.5

The first name in this folio is *liok rogh lie*. I believe *liok* is related *lich* and *lye* found in the names *lichwale*, *lyghwal* and *lyewal*. They are registered names for common gromwell, Lithospermum officinale (TH). The name starting the second paragraph is also close to a registered name for common gromwell, *lityll*. The Voynich name is *lotle*. The petals in the illustration are blue, it does not match the white petals of common gromwell. It may rather be **purple gromwell**, **Lithospermum purpureacoeruleum**. The illustration has short strokes on the sepals. It fits with the hairy white sepals of gromwell. The flower is bended downwards in the same way as the flower of gromwell does. The leaves are sharp pointed. In the illustration they are drawn like large toothed shapes, maybe to express it as a bushy plant.



Chalk and limestone districts in two distinct habitats. Inland, it grows in woodland edges and rides, and on lanesides and banks in partial shade. On the coast, it is found amongst naturally dwarfed, open scrub on slumped cliffs, slopes and crags. Garden escape on roadsides and waste ground

ccoeffecy ogand mo(tl)ie odaun motlie/natlie wdun motlé/nightli woden particplored/nocturnal crane's-bill

> TH: Woderove = Geranium L. ssp. esp robertianum

Modern English name: Odin's grace. = Geranium Sylvaticum

2 1/2c08ag kRioda3 k-riodegh Chi-reod-egh Christ-red/ruddy-eye

> Welsh: Pig yr Aran Rhuddgoch = Geranium sanguineum Rhudd = red

3 #c8 08 (bl)id o(rd) blidwrt blid wort beautiful wort



F57r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Geranium phaeum. Flora Batava, Volume 5, illustrator Christiaan Sepp, Jan Kops (1828)



The first name of this herb is *natlie wdun* or *motlie wdun*. Geranium ssp. are registered with the medieval vernacular name *woderove* (TH). The illustration matches Geranium very well. If the name is natlie, it may be related to nightly, and dusky crane's-bill, Gera**nium phaeum,** makes sense as a match. It has deep purple flowers with a large style. The leaves are toothed and palmate. The bulbed root forming a clump of many plants is similar too. The herb's second Voynich name is k-riodegh, Reod mans red or ruddy (MEC). Red is found in the Welsh name of dusky crane's bill, *Pig yr Aran Rhuddgoch*, where *ruddgoch* means *ruby red*. It is not possible to distinguish whether this herb is G. phaeum or G. sanguineum from the illustration. Maybe it is even another subspecies like sylvaticum, pratense, columbinum or maculatum. It is interesting to note that the second name in this folio is wdun. This name can be associated with G. Sylvaticum's modern English name *Odin's grace*. In old English the Norse god Odin was called *Wóden*. It is not far from wdun.



G.. phaeum. Roadsides wood-borders; it usually grows close to habitation as a garden escape. moist, fertile soils. Lowland

folio 57v: The first diagram in the manuscript

Folio 58r: Text with stars in the margins

Folio 59-64: Lacking

## Hundekjeks eller Bjørnekjeks

## f65r ?Anthriscus sylvestris or Heracleum sphondylium / ?Cow parsley or Cow parsnip

า ปิโณห์ อัสภ์ ลอส์ okau(rd) da(rd) aza(rd) **okeurth derd egert** áche-wrt déred agrest Apium-wort exalted Cow parsley/parsnip

Alternative reading: áche-wrt the arth agrest

MEC: Áche = any of a group of celery-like plant. TH: wyld ache= Anthriscus sylvestris

agreste =
Anthriscus sylvestris,
Heracleum sphondylium

Welsh: Arth = bear: In Norwegian bear (bjørn) is found in the name of cow parsley, Heracleum sphondyllium



F65r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Heracleum sphondylium. Fuchs, L., New Kreüterbuch (1543)



Photo source: Heracleum sphondylium . Anthriscus sylvestris. By Dalgial - Own work. CC BY-SA 3.0

There are only three words describing this plant. My interpretation is *okeurt derth egert*. It can be related to *áche-wurt derth agrest* and means *Apium-wort exalted/famine cow parsly/parsnip* (MEC). *Agreste* is a name registered for both **cow parsley Anthriscus sylvatica**, and **cow parsnip**, **Heracleum sphondylium**. *Ache* is a name registered for any of a group of Apium plants. The illustration has a white umbellifer. The leaves are deeply loved and toothed. The root has tubers. I believe it matches cow parsnip best. But it is not possible to distinguish cow parsley and cow parsnip for sure from the illustration. Both plants are edible, but the cow parsley is easy to confuse with other species of the Apiaceae family, such as the deadly poison hemlock, hemlock water-dropwort and fool's parsley.



Anywhere, and is mostly found growing in damp ditches and hedgerows, along riversides, in open woodland, and in meadows and rough grassland 1 H, Feeth, (bl)e fli(fl)e
blé fliflé
blé fliflé
Dark fly(?)-flea

TH/MEC: *fle(a)*-wort = Plantago indica

2 Hoces, offer tees, komde okar Ride komde/konde oker ride?co-mede/cunnede aker wride?craw or cow/'sought for' meadow field clump



F65v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Dietrich, A.G., Flora regni Borussici (1832-1844)



Photo source: Plantago indica. By Le.Loup.Gris - Own work, CC BY-SA 3.0 and By Stefan.lefnaer - Own work, CC BY-SA  $4.0\,$ 

This was the first herb I identified by name. Its first name is **blé fliflé**. The first word **blé** means **dark** (MEC). The last part, **flé**, is related to **flea** in the registered name **fleawort**. It was used for **dark psyllium**, **Plantago indica**. The illustration matches dark psyllium very well. It has long leaves shaped as needles. They carry many green lumps with "fleas". From the hairy tap root grows several branched stalks. The illustration has a large blue lump. It can look like one of the lumps in the stage of growth when it is deep purple. The second name of this herb is **komde aker wríde**. It may may be realted to **cou-mede áker wríde**, meaning **cow-meadow field clump**. The first word can also be read **kunde**. It is close to **cunnede** and means **sought for** (MEC).



Open sandy places, including waste ground, and in docklands, usually casual but sometimes naturalised on roadsides and in meadows. Lowland.

1 0/108019 otiodof otiodof ate-wod-dof edible-dove wete-wod-dof water-dove

> TH: Dovesfoot, dowort wodewort = geranium mole/ colombinum

2 HE=08 == 080 klod Riode klod riode glod reode gold red

> See f57r a geranium phaeum or sanguineum called riode.

4089 22089 bode Riode bode riode be wode reode be "wode"red

> TH: wodewort, woderove = geranium mole/ colombinum



F66v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Geranium molle. Johann Georg Sturm (Painter: Jacob Sturm) -Figure from Deutschlands Flora in Abbildungen (1796).



The first name in this folio is *otiodof*. It may relate to *ate-dof*, meaning *food-dove*. Another interpretation is *wete-dof*, meaning water-dove. Dove is found in the name dovesfoot and dowort. They are registered for dove's foot, Geranium molle. If the name is water-dove, the species may be Geranium palustre as it grows in marshes. Other candidates are Geranium sylvaticum or pratense. The flowers of Geranium paulustre are often deep violet. They have a light-colored center like those in the illustration. The illustration's flower matches Geranium well. It is hard to say which one of them it is. Notice the bulb just below the branches in the illustration. A similar bulb is found in the botanical illustration by Sturm. It is also notable that the root looks a bit like a bird's foot. There are two herbs identified as Geranium in the manuscript. The other one is in f57r. They are both called *riode*. It is probably related to *reod*, meaning *red*.



Dry, grassy places like meadows, pastures, verges and lawns, as well as on cultivated ground and waste ground.

Folio 67-73: Astronomy/Zodiac

Folio 74: Lacking
Folio 75-84: Balneology
Folio: 85-86: Rosette map

boay Risay bweg rsegh be weg-ris-egh Be road-stalkhigh

> Centaures nigra habitat= road verges

2 えっぱっマ Ro(bl)or **roblwr** rod-bul-wr red bull wort

TH: bullwed = Centaurea nigra

3 cco€co mo(bl)io **nop-blio** knop-blithe / knop-blo

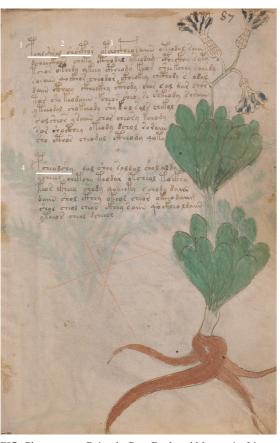
MEC: *knop-blithe* = knapwed

TH: *knapwort*, *clubwede* = Centaurea nigra

MEC:  $bl\acute{o} = dark$ 

4 checken RiodRe riod-re reod-wre red wort

> MEC: Réd-wort = raggede ~, ?= rag ~; rag ~, red ~, q.v.; renninge ~, a thistle or teasel of some sort. TH: C. nigra = matefeloun with a rede flour;



F87r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Centaurea nigra. Smith, J.E., English botany, or coloured figures of British plants, ed. 3, vol. 5 (1866).



Photo source: Centaurea nigra. BerndH - Own work, CC BY-SA 3.0

This herb was first identified by the fourth word *naplio*. The first part of it, *nap*, I read in the same way as the modern English word *knap*. There are registered names with *knap* in it. The most related is *knap-blithe*, used for knapweed (MEC). The second part of the first name *naplio* is *blio*. It is possibly related to *blithe*, as in the registered name. It can also be related to *blo*, meaning *dark*, or *bleu*, meaning *blue*. There is a knapweed with black in its name, **black knapweed**, Centaurea nigra. Another one has blue in its name, blue knapweed, Centaurea montana. The first is native and the second was introduced to cultivation in Britain before 1596. The illustration matches knapweed well. It has a tall erect stalk, lanceolate leaves, several flowerheads with large scaly bracts and a taproot. There is one more name in the text. It leads to black knapweed. The second word in the first paraph is *roblwr*. I believe it is related to *rod-bul-wr* and means *red bull wort* (MEC). It can be associated with the name *bullwed*, registered for black knapweed (TH).



Absent from very damp or acid sites. Meadows, pastures, road verges, field borders, waste ground, scrub land and woodland edges

bblme

pplme

popyll-lamb

TH: popyll
= Capsella
bursa-pastoris
TH: lamb's heart
= ?Capsella
bursa-pastoris,
?thlaspi arvense

2 ﷺ (bl)iodar **blioder** bleddyr

TH: bleddyr-wort, bledewort, stancheblode, nozebledill, blodwort = Capsella bursa-pastoris

oblme
oplme
hop-lamb
Raised dryer
ground lamb

TH: lamb's heart = ?Capsella bursa-pastoris, ?thlaspi arvense



F87v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Bilder ur Nordens Flora (1917-1026). Large: Capsella bursa-pastoris, small: Thlaspi arvense



Photo source: Thlaspi arvense. Enrico Blasutto - Own work, CC BY-SA 4.0

These two herbs seem to be called the same, *lne* or *lme*. When I associated this name to *lámb* (also *lam*), I found the two herbs **shepers-d's purse**, **Capsella bursa captoris** and **field penny cress**, **Thalaspi arvense**. They are both associated with the registered name *Lamb's heart* (TH). They do not match well enough with the illustrations to rely only on this single interpretation. But the first word in paragraph one is *pplme*. Sheperd's purse was called *popyll*. With the registered names *popyll* and *lamb* in mind, the name *pplme*, can be divided to *ppl-lme*, and be read *popyll-lamb*. Sheperd's purse matches the right herb with a rosette of deeply lobed pinnate leaves. It has numerous white flowers, a reddish stalk and a tap root. Its flowers are not red, but the seeds have an orange color. There is another name in the first paragraph, *blioder*, that matches Sheperd's purse too. It is registered called *bleddyr-wort*, *bledewort*, *stancheblode*, *nozebledill*, *blodwort* (TH). *Blioder* may be a variation of *bleddyr* or *bleader*. Sheperd's purse has traditionally been used to stop bleeding. It is closely related to **Arabidopsis thaliana**, the thale cress, mouse-ear cress. This is another good alternative to the herb to the left. In the Highlands and Essex was Sheperd's purse used to stop bleeding and for excessive menstrual discharge (FM).



Arabidopsis thaliana by Benjamin Zwittnig - http://www2.arnes.si/~bzwitt/flora/arabidopsis\_thaliana.html. CC BY 2.5

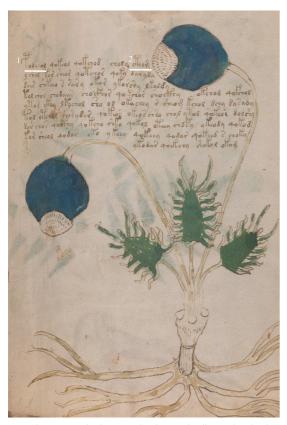
1 agccog agmog eghnogh hey-nag

MEC: Nag = horse

TH: Centaruea scabiosa = *hey-hove*, *horsfartis* 

2 Hos (kl)o(rd) klwrt ?kul-wort

Kule, etymology: Old Norse kúla ("swelling"), from Proto-Germanic \*kūlō. Middle German variants of the word in the original sense "ball used in skittles or Paille-maille" are kaule, kulle. kugel = ball, sphere



F90r1. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Centaurea scabiosa. Vol. 10, Flora Batava, Kops, J. (1849).



Photo source: Centaurea scabiosa. By Robert Flogaus-Faust - Own work, CC BY 4.0.

The first name in this folio is *eghnogh*. I believe it is related to *hay nagh*. *Nagh* means horse. *Hay* and *nagh* is close to part of the names *heyhove* and *horsfartis*. They are registered for **greater knapweed**, **Centaurea scabiosa**. The illustration has similarities to greater knapweed. The root is especially well drawn and the large lump of bracts. The leaves are deeply lobed. The match, except from being placed only at the root of the plant. The flowers are drawn without petals. There is a second interesting name, *klwrt*. I believe it is describing the ball shaped flower, where *kl* is related to the proto-Germanic *kūlō*, meaning *ball*.

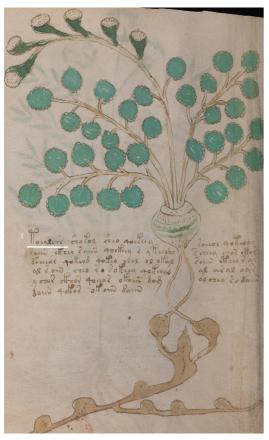


Dry grassland, in hedgerows, on chalk downland, and and on cliff tops on lime-rich soil.

1 Hocager2
k oia3ls
k wieghls
Cy-wáles

TH: Pimpinella saxifrage = Cy-wort ey3ewort, sedwale, heywort, weywort, yworte.

MEC: Wále or wáles (early infl.) = root.



F90r2. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Fuchs, L., New Kreüterbuch (1543)



Photo source: AnRo0002 - Own work, CC0



Photo source: Salicyna - Own work, CC BY-SA 4.0

This herb was identified by the first word *kwiehls*. I believe it relates to the names *cywort* and *sedwale*. They are registered for **burnet saxifrage**, **Pimpinella saxifraga**. If one adds parts from these two names, one gets *Cy-wale*. It is close to the manuscript's *k-wiehls*. *Wale* means root. The illustration has green flowers that look almost like some of the simplified bell flowers in the manuscript (see f54v). They do not look like the umbellifer of burnet saxifrage. I still believe this is burnet saxifrage. The leaves are similar and they grow as a rosette from the root. In addition, a few leaves are placed on the stalk. The root is double like in the illustration. It consist of a long tuber. On top of it is a bulb. From the root grows several stalks of leaves. The stalks can carry several umbels.



Makes up a large part of the turf in some of southern England's chalk downs. Dry, well drained, calcareous soils (particularly chalk and limestone downs), occasionally, acidic sands.

1 Hasacig (bl)adRe bldere blede-wre bleed wort

> Scabiosa = blood purifyer and sore healer

<sup>2</sup> Hereos, Hear kliode (bl)iaz **kliode bliech** k-leo the bleach k lion the pale

See f34v. This herb relates to Succisa pratensis, Devils bit:
TH: lyonnestoothe
= Succisa pratensis
MEC: lion = lion,
fig. Christ, the
Devil



F90r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Scabiosa atropurpurea. Jaume Saint-Hilaire, J.H., flore et la pomone françaises (1828-1833)



Photo source: Scabiosa ochroleuca, cream scabious. By T. Kebert - Own work, CC BY-SA 4.0

The herb in this page is illustrated with pinnate leaves. It has green petals, several flowers and a tap root. The closest I get from its appearance is some kind of Scabiosa or Knautia. There is another herb in f34r in the manuscript that is identified as Devil's bit, Succisa pratensis. Devil's bit reminds of Scabiosa and Knautia in appearance. The shape of the leaves is separating them. They are registered under some of the same names (TH). These names are not matching any of the names neither in f34r nor f90r. There is an interesting connection between the names in f34r and f90r though. The second paragraph in f34r starts with the name *klio*. It can be interpreted as *k-lio*. *Lio* (*lion*) is also found in the first name in f34r, *lioiple* (*lion apple/ball*). Lio is also found in this page. The second paragraph starts with *kliode bleach*. It may be interpreted *k-lio* the *bleach* and means *k lion the pale* (MEC). It makes sense both associated with f34r and the color of the herb in this page. This strengthens the idea thatthe herb in this page is a kind of Scabiosa or Knautia. An infusion of Knautia can be is used internally as a blood purifier and externally for treating cuts, burns and bruises (P). With that as a background, the first name in the text may be read *blede-wre*, meaning something like *bleed-wort*. Species of scabious were used to treat scabies, and many other afflictions of the skin including sores caused by the bubonic plague. The first words in this folio is *blde-re go flie o bochsewn*, it seems to be related to *blede-wre go flie o boch's wen*, meaning *bleed wort go drive away a bubo (of the plague) lump*.

- F6807 5003 lios lodar lios loder/lóther leos loder/lóther Lion's (Devil's / Christ's) harmer / porter
- 2 200 Ro3 rogh rogh

?Urtica urens: rough urtie

- 3 0000008 o<sub>3</sub>Riod wgh-riod wogh-reod harm-red
- Mczco8ag 20089 400000Hg kRioda<sub>3</sub> Riode golioke k-riodegh riode golioke k-reod-thegh reode galice k-red-stalk red gallic

TH: Urtica ssp: red-nettyll, gallice urtie

6 Hosans (kl)odau(rd) clothe/clwde-urt cloth-wrt cloth wort clawed-wrt clawed wort



F90v1. Photo source: Beinecke Rare Book and Manuscript Library, Yale University



Photo source: Urtica diocia. Fuchs, L., New Kreüterbuch (1543)

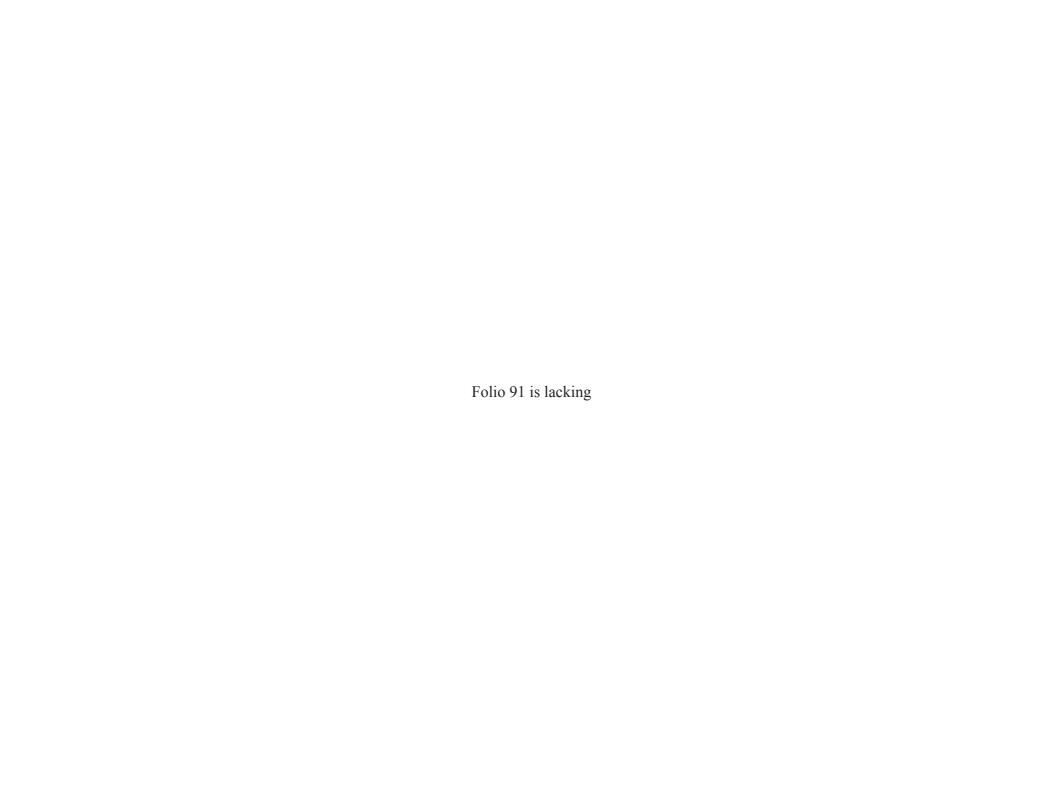


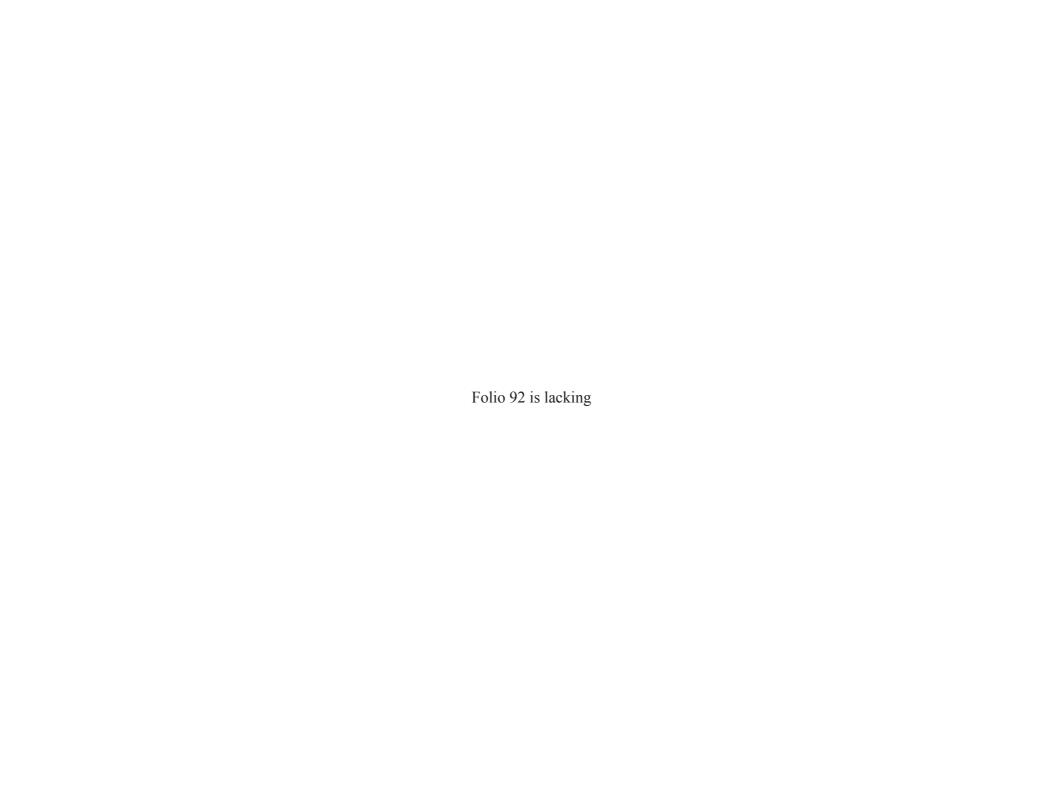
Photo source: Urtica diocia. Frank Vincentz - Own work, CC



Photo source: Urtica diocia. Frank Vincentz - Own work, CC BY-SA 3.0

This was one of the first herbs I identified. The words *lios loder* are the same as in Middle English, and means *lion's harmer*. The name made sense because the root looks like a lion. The leaves also looked like the only harming plant I knew at the time, *nettle*. I later found other names in the page that strengthened this identification. A repeated name of this herb is riod. It is close to reod and means red (MEC). Red is found in the registered names of nettle, Urtica (TH). The flowers of this plant did not make sense to me before I found a closeup picture. They look like a cross. Another name in this folio is klotheurt or klwdeurt. It can be related to clóthe meaning cloth. Nettle was used to make fibers for cloth. Or, it can be related to *clawed*, as the nettle stings. Another repeating word is *ogh* or *wgh*. It may be related to *ugge*, meaning *dread*, or *wough*, meaning wickedness or harm.





odRoz wd-rogh woderuff

> TH: Wode-ruff, ?wuderove = Chrysanthemum balsamita.

2 16 secce2 ko 3Rmos ko hi-remos co/cou hi-?remos craw/cow in remorse

See f44v: co = Chrysanthemum vulgare

- o (kl)odaze
  oklodeghe
  a glod-eghe
  a gold eye
- 4 collos loko(rd) lokwrt louk-wort lukewarm/warm
- 5 क्षिक्रिय सेट० (kl)odar Rio **kloder rio** glod-ére rew gold-ear warm/ lukewarm
- o flore
  a flo-re
  flowere
  flow wort

See: f20r Flothme = Thymus. MEC: flo = of a wound or sore: to give off (blood or pus) overflouen: med. of hemorrhoids: to bleed too much



F93r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Tacanetum balsamita. Curtis, W., Botanical Magazine (1800-1948) vol. 129 (1903), and Dodoens R., Stirpium historia commentariorum. (1553-



Photo source: Tacanetum balsamita. Joan Simon from Barcelona, España - Tanacetum balsamita, CC BY-SA  $2.0\,$ 

This herb was identified by the first word in paragraph one, *wd-rogh*. It is close to *wode-ruff*, a registered name for **costmary**, **Tanacetum balsamita** (TH). This is the first place I found that clearly indicate that f covers the sound of f. It is a sound that sometimes turns into f, like for example in modern English *rough*. The flower is drawn very large in the illustration. There are other illustrations of costmary with a large flower like this, for example the one of Curtis above. The herb in this folio is given some of the same names as the other Tancetum in the manuscript, Tansy, in 44v. Tansey has the same petalless flowers. Both are called *ko*, meaning *craw* or *cow* (MEC). The name *flo-re* may be interpreted as *flo-wre*, meaning *flow wort* (MEC). *Flo* is also found in the name *flothme*, identified as Thyme in f20r. It may refer in general to the flow of fluids in the body, to blood, to menstruation or to diseases like dysentery. In medieval times, costmary was used for menstruation problems. (Wikipedia)

Garden plant

1 40222089 bosRiode posriode pus-reode peas red

> MEC: Reode = Red, ruddy Pese or (S or SM) pose, pus = peas

TH: wild pese = ?lathyrus tuberosus

TH: lathyrus ssp: a herbe that hathe a stalke out of the whyche go the othir stalkys with rodende levys as posis and yclepyd ursope, grondswyly. Comon pese

2 Hizolla Hosa kRote (kl)ode krot clode k-rote clodde k root lump



F93v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University



Photo source: Lathyrus tuberosus. Bulliard, P., Flora Parisiensis (1776-1781)



This herb is called *pos-riode*. It is close to *pus-reode* and means *peas red* (MEC). The most usual form of the word peas in Middle English is *pese*, but in the South and South Middle of England *peas* could be written *pose* or *pus* (MEC). *Wild pese* is a registered name associated with tuberous pea, lathyrus tuberosus (TH). Lathyrus ssp. are described to have rodende levys (TH). It means ruddy petal (MEC). The leaves drawn can be associated with vetches and the red circles on top of the plant can be the round shape of the flowers. The most important part of this herb is the root, which is large and tuberous, and a bit hairy. There are several stalks from the root in the illustration. It fits with tuberous pea as it also spreads vegetatively from the root system. Tuberous pea has edible tubers with nutty flavor.



Warm, slightly alkaline, aerated soils and grows best in partial shade. It can be found growing in fields, pastures, and disturbed areas

k-léde/lide k field/lead

2 Hand bawr

bewr bewort

TH: Melissa officinalis = bewort

3 ercoand scheces lidawn dRmde lidewn th-rnthe lide/lede-wyn/wan the renneth lead vine/grayish that runs

TH: wodewynd, = Glechoa hederacea

4 offagand okazawn akehewn ake-y-wyn ache "y" vine

> TH: erth-ywyn, = Glechoa hederacea

5 offar c289 okar lde oker-lde a ker-lide a "ker"/field lead

> TH: kerwort = Melissa officinalis

6 80115-80 dekl(sd)e the eiklste the ake-leste the ache removing

> Ground ivy was used to clear the head, and get rid of headaches (FM)



F94r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.





This herb is called **bewr** (2) and **o)ker-lide** (5). Both names are close to **bewort** and **kerwort**. They are registered names for Melissa officinalis (TH). Melissa officinalis has white flowers and do not match this illustration. The illustrated herb may be another plant in the mint family. The herb in the illustration is drawn like the climbing herbs in the manuscript, or like those running on the ground, it has a long stalk bending downwards. It may be ground ivy, Glechoma hederacea. Ground ivy is an aromatic herb in the mint family. It has violet flowers. The numerous small leaves have waved margin. They are placed in opposite arrangement on the unbranched stalk. The the root has similarities to the one in the illustration. It spreads by runners. The first four words in the folio say Heres, of and cresons 82.289 / klide obewr lidewn th rnthe / k-lide a bewr lide-wyn the renneth / K-lead a "bewort" lead-vine that runs. Lde and lide are found several places in the names in this folio. It may be related to lid as the flowers are lead violet. Another interpretation is that they are related to *léde*. It means *field*, and one of groud ivy's habitats are *fields*.



Grasslands and wooded areas or wasteland. It also thrives in lawns and around buildings since it survives mowing

1 देटकु ट्टडकर Ri(sd)e lidar **riste lider** rist lid-ére good lead ear

2 geress aRi(sd)e ei-riste ei-riste eye/water rest (freedom from pain)

3 Hesaw eeesg kidaun lide **kideun lide** ?cyððan-léde ?homeland meadow

4 9cccco elmo elmo ei/é-limo eye/water limon ?refeering to the greek name leimon meaning meadow?

5 receand lidawn lidewn lidewan lead grayish

> MEC:  $l\acute{e}d$ , lid(S) = lead

Liomonium = leadwort family

ablaur
ei-pldeur
ei/water(?)blede-ur
eye/water(?)
bleed wort

Limonium is used to treat haemorrhage

## f94v ?Limonium / Sea lavender



F94v. Photo source: Beinecke Rare Book and Manuscript Library, Yale University



Photo source: Limonium vulgare. Smith, J.E., English botany, or coloured figures of British plants, ed. 3 [B] [J.E. Sowerby et al] (1863-1800)



Photo source: Limonium britannicum. Len Worthington, CC BY-SA 2.0

This herb was identified by its appearance. In this page we are looking for a herb with a dense basal rosette and tubers. The shape of the flower may be misleading since a raceme can be illustrated by a long bract and a single flower. See for example f14v, f37v and f94. The flower is probably violet, blue or purple. The person coloring this illustration has made an effort of mixing the blue and green more grayish. I searched for plants with a basal rosette and lanceolate leaves, with tubers and bluish flower(s. I found *ker* several places in the text. This is not an Apium so *ker* may mean *marsh* here. I added *marsh* as a habitat. Limonium appeared as an alternative. Limonium binervosum for example, grows in salt marshes. Except from having a tap rot and not tubers it is a good match. Limonium belongs to the family leadwort. The first name in this folio is *riste lider*. *Lid* is found in Middle English southern dialects. It means *lead*. *Er* is found in another herb name in the manuscript. In f40v the herb is called *lik-er*. it is identified as roof house leek, also called earwort. Earwort has succulent leaves with the same lanceolate shape as Limonium binervosum. The last part of the first name, *lider*, may then be related to *lid-ére*, meaning *lead ear*.



**Marrisp** 

L binervosum: A wide range of coastal habitats including sea-cliffs, dock walls, shingle banks and saltmarshes

1 टेंड०२ Rdor **rdwr** ?wríde -wr ?clump-wort

2 ccfcs, libl(sd)e liplste lib-liste ?life/love cunning/desire

fawn fewn foam/fawn foam/?reddish brown

> TH: foam-dock = Saponaria officinalis

MEC: fawn = ?as adj. or used attrib.: ?of a fawn-like (reddish brown) color

4 Hersol of eachers, kldor or litl(sd)e

kldwr or litlste k-lid-wr or lit-liste k lead wort or light cunning/ desire



F95r1. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Saponaria officinalis. Sturm, J., Sturm, J.W., Deutschlands flora (1798-1855). Deutschl. Fl. vol. 2 (1798)



Photo source: Saponaria officinalis. By 4028mdk09 - Own work, CC BY-SA 3.0.

This herb was identified by the third word in the first paragraph, *fewm*. It reminds of *foam*. There is a plant with the registered name *foam-dock*. It is **soapwort**, **Saponaria officinalis**. The illustration shows stalk that is long and bended downwards. In the manuscript creeping or climbing plants are drawn with bended stalks. Soapwort occasionally has a long prostrate stem. The illustration matches its paired leaves. The stalk is unbranched and the flowers are purple to white. The root is forming a clump as in the illustration. The identification is still uncertain, as it is only based on the word *fewn*. The word may be interpreted differently.



Fields, roadsides and along the banks of streams.

- ا حکود کی وک وحدی Ri(sd)e or l(sd)e riste or lste wriste or liste good and cunning
- 2 8 agters d agfle th eghfle the egh-flé the eye-flea the high flea

TH: fleawort = Pulicaria vulgaris and dysenterica MEC: egh = eye, high

3 crettest cres l(tl)efle ltle-fle litle-fle little flea reduce/small flying insects

> Modern english: Small fleabane = Pulicaria vulgaris

May not be a plant name

- 4 dar and (sd)ar awn ster ewn stér?hewen incense ?Calendula
- 5 1208 kRod k-rod K-?rod

TH: fleawort = Pulicaria vulgaris and dysenterica MEC: egh = eye, high







Photo source: Pulicaria dysenterica. Curtis, W., Flora Londinensis (1775-1798)



Photo source: Pulicaria Vulgaris. By Christian Fischer, CC BY-SA 3.0.

In this text I found *ltle-fle* as word number seven. The word lacks only a few letters from the modern English *little flea*. There is a herb with a name that can be associated with *little flea*. It is **small fleabane**, **Pilcaria vulgaris**. In medieval England it was called fleawort (TH). The illustration shows many similarities to small fleabane. There is also another word ending with fle, d egh-fle. It may be interpreted as the egh-fle. It means either the high flea or the eye flea (MEC). This name may refer to the taller common fleabane, Pulcaria dysenterica. It can also refer to appearance or medicinal use. The herb illustrated has a colorless stalk. It fits with common fleabane that has a white stalk. Small fleabane has a red stalk. Common fleabane has longer petals, but these appear only when the herb reaches a certain height. Common fleabane is often forming dense clusters of plants, and spreads by root. It matches the illustration well. Fleabane's common name comes from its former use as an incense to drive away insects. The word *ltle-fle* is not necessarily a plant name It can be read *litli* (SW or WM) *flie*, meaning *reduce flying insects*. The word *ster* is found in name 4. *Ster* means to burn *incense*.



Damp, wet, open habitats like marshy places, water- and fen-meadows, tall-herb fens, by water sides, in dune-slacks, wet hollows and seepages on sea-cliffs, damp woodland rides and roadside verges.

1 Heros, klode **klode** glode gold

TH: *goldwort* = Filipendula ulmaria

2 મિલ્લા સ્ટેન્ડ્ર bodar Rode **b a der rode** be a dere róde be a dear ?stalk

3 tollcamo gokidawn **gokidewn** gog-kide-wan marsh-brushwood-luster less



F95v2. Photo source: Beinecke Rare Book and Manuscript Library, Yale University.



Photo source: Filipendula ulmaria (L.) Maxim. Zorn, J., Icones plantarum medicinalium, Abbildungen von Arzneygewächsen, 1. Aufl. (1779-1784)



Photo source: By Franz Xaver. CC BY-SA 3.0.

There are several ray flowers in the manuscript called *klode*, in the meaning of *gold*. This herb is also called *klode*, but it is not a ray flower. Gold is also found in the registered name *goldwort*. It was used for **meadowsweet**, **Philipendula ulmaria** (TH). The illustration matches meadowsweet quite well. It has white flowers. The leaves are ovate with a toothed margin. Underneath they are downy. The tap root has many root threads growing downwards. The third name in this page is *gokidewn*. The first part gok reminds of *gog* a word for *marsh*. Marshes are of the habitats of meadowsweet. *Gokidewn* can be divided to *gok-kide-wn*. It may be related to *gog-kide-wan* and translated to marsh brushwood lusterless.



Wet ground in swamps, marshes, fens, wet woods and meadows, wet rock ledges and by rivers, but not on acid peats.

oglices, Loctano ogkmde Roibaun ohkmde roibun hawkmede Robin

MEC: *Robin* = a familiar form of Robert

TH: Haukfoot
= geranium ssp.
wede-wort =
Geranium robertianum

oitRe wit-re wede-wre

*TH:* wede-wort = Geranium robertianum

3 Hersas tollers kR(sd)az gokke k-rstegh got-re K-rist-egh gátwre K good eye road wort K-rith-thegh gát-wre

> Habitat: Limestone pavements

4 Here fland kRie kawn k-rie kwm K-writhe/?wrie cweme K-wreath/?cover pleasing

5 Percear erces Merces bridar Ride tride b-rither ride

t-ride
bi rith-er wride
te wride
by justice air
flourish this
clump

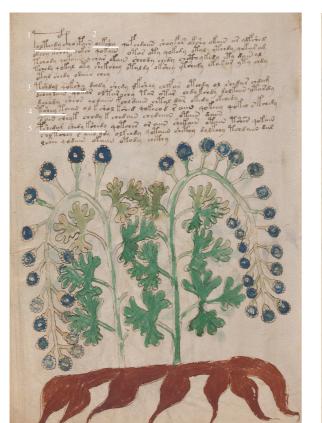






Photo source: Geranium robertianum. Fuchs, Leonhart, 1543. New Kreüterbuch



Photo source: Geranium robertianum. By H. Zell-Own workCC BY-SA 3.0

This herb is called *ohkmde*. I believe it is related to *hauk-mede*. *Hauk* is found in the registered name *haukfoot* used for **herb-Robert, Geranium robertianum** (TH). *Mede* and *wede* is often used for the same herbs, and herb-Robert is also called *wede-wort* (TH). The illustration fits well with herb-Robert. It is a creeping plant and the stalks are drawn long and bended. This characteristic is found for many of the creeping and climbing plants in the manuscript. The do not have a stalk that is self-supported. The leaves, flowers and root have great similarities to herb-Robert too. From the root grows several stalks. There are things that do not match. The flowers are too many and the stalk is unbranched. Usually mistakes in illustrations are caused by simplifications. I still believe this is a Geranium. The mistake of too many flowers and an unbranched stalk may have come as a result of the need to explain that this is a prostrate plant. It is easier to fill the long bended stalk with flowers than the complicated shapes of the leaves.



Shade-tolerant herb. Woods, hedgerows, walls, shaded banks, limestone pavements, screes and coastal shingle

f96r Daucus carota / Wild carot Vill gulrot

l flod ecced kor lmor kor lmor "kar" elle-mor "kar" "elle"-root

TH: *f)elle-mor* = Daucus carota

See the plants in the carrot family called Ma2 and Ma2: f4v, f31v, f33v, f39v, f43r,

2 officed okmor **okmor** áche-mor Apium-root

> See the plants in the carrot family called ok and eike f5v, f14v, f18v, f27v, f65r,

3 effection (tl)o(kl)e tlwkle tillow(?)-clé cultivation-Claw(root)

Tillow of tillen = to cultivate

etior
eitiwr
ét/heit-wr
food/hot-wort

Roto (fl)e
roto fle
rot o felle
rot of Daucus
carota
See (1)



F96r. Photo source: Beinecke Rare Book and Manuscript Library, Yale University

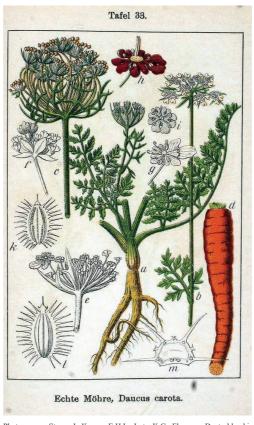


Photo source: Sturm, J., Krause, E.H.L., Lutz, K.G., Flora von Deutschland in Abbildungen nach der Natur, Zweite auflage (1900-1907), vol. 12 (1904)



Photo source: Tigerente - Own work, CC BY-SA 3.0. And Jac. Janssen from Baarlo lb, NL - 20150726 010 Kessel Weerdbeemden Peen Daucus carota, CC BY 2.0

It was hard to imagine what kind of plant this illustration showed. But the names made the strange shapes reasonable. I first found *lmor*. I believe it can be divided to *l-mor* and be associated with the medieval vernacular name *elle-mor*. It is registered for wild carrot, Daucus carota (TH). The first word in the text is *kor* or *kar*. *Kar* and *ker* is repeated for the plants in the carrot family in the Voynich manuscript. It fits with the interpretation of *l-mor*. Carrot is an Apium plant. Apiums are in the manuscript called *ok* and *eike*, and they match plants registered under the name *áche* (TH/MEC). *Ok* is found in the second line in the word *okmor*. This is the third name matching carrot in this text. *Okmor* can be divided to *ok-mor*, and associated with *áche-mor*, meaning *Apium root*. the illustration matches wild carrot. The root is tuberous and the leaves are finely divided. In the illustration the leaves look palmate. In reality thay are tripinnate. The tripinnate shape is hard to draw. I find the simplification reasonable. The stalk of wild carrot is hairy. We find the hairs as dots in the illustration. It has an umbellifer that curls up.



Infertile, well-drained, often calcareous, soils. Disturbed or open turf on chalk downs, rough grassland on roadsides, waysides and railway banks, quarries, chalk- and gravel-pits, and waste ground.

#### 1 2002 20003 Dioscorea communis (Tamus communis) / Black bindweed

Rios Rmor reos rnwr reos-run-wr Fall/drop running herb

2 400 2009 0807 goibRode odar qwip-rode wder gwip-rode wode-er hwip-stalk "wodeere"

TH: Convolvulus arvensis (another bindweed) = ere terestre, wodebynde

3 Lecco of ar (bl)mo obar blmo o ber ?bel-mon of berry

See f54v, field bindweed ( perennial morning glory, small-flowered morning) called belmaun: bel-mórn/bell món bell-morning/ bell-devil

4 a20208 aroso(rd) er-os-wrt ere-urs-wort

> TH: bynde de urse, ere terestre = Convolvulus arvensis (another bindweed)

5 202a7 + 20g2a7 sosar + soesar swsher + sweisher savages-ere

TH: Dioscorea communis = vinsavage







Photo source: Prof. Dr. Thomé's Flora von Deutschland, Österreich und der Schweiz, in Wort und Bild, für Schule und Haus, Pl. 136, 1903



This herb is quite easy to identify by the illustration. It has caracteristic heart shaped leaves, red berries and a large tuberous root. In addition, it is drawn with a long bended stalks typically for the creeping or climbing herbs in the manuscript. I believe the herb illustrated is **black bindweed**, **Discorea communis**. There are two interesting words, *swser* and *sweiser*, that can be two versions of the same word. I believe they relate to savage, a registered name of black bindweed (TH). The association is maybe not obvious, but as the sound of sh could be written simply s, these words can then be swsher and sweisher. As er is found in several of the names in this folio, we can divide the words into swsh-er and sweish-er and we are getting close to savage-ere. Ere is also found in another bindweed's registered name, ere terestre. It was used for field bindweed (See f54v). There is an illustration in f17v that is quite similar to this last illustration. It is identified as rough bindweed. The only thing separating them is the tendrils that rogh bindweed have. It fits with the identification, as black bindweed has no tendrils.



Mostly on neutral to calcareous, well-drained soils, chalk and limestone, clay. Hedgerows, woodland edges and along paths, waste land.

# **ABBREVIATIONS**

**TH:** Plant Names of Medieval England by Tony Hunt, D.S. Brewer, Cambridge 1989.

**MEC:** The *Middle English Dictionary* at the *Middle English Compendium: https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary* 

**D:** *De Materia Medica, Dioscorides*. Tess Anne Osbaldeston, 2000, IBIDIS PRESS cc. http://www.cancerlynx.com/dioscorides.html. Dioscorides is chosen as it is known that Materia Medica was widely read in Europe for more than 1500 years, after its creation 50-70 CE.

**P:** *Plants for a future*: https://pfaf.org/user/Default.aspx

**FM:** Medicinal Plants in Folk Tradition. An ethnobotany of Britain & Ireland. David E. Allan & Gabrielle Hatfield. Timber Press 2004.

### **SOURCES**

### Plant names and translations

Plant Names of Medieval England. Tony Hunt, D.S. Brewer, Cambridge 1989.

The online Middle English dictionary at Middle English Compendium: https://quod.lib.umich.edu/m/middle-english-dictionary/dictionary

### Pictures from the Voynich manuscript

Beinecke Rare Book and Manuscript Library, Yale University.

### **Botanical illustrations**

- 1. Wikimedia Commons
- 2. http://plantillustrations.org

### **Photos**

Wikimedia. All the photos used are either Public Domain or license free by Creative Commons. Attributions are given to the photographers. Some photos are cropped.

# Habitat and maps of distributions of the flora

Online Atlas of the British and Irish flora: https://www.brc.ac.uk/plantatlas/

#### Medicinal uses of herbs

De Materia Medica, Dioscorides. Tess Anne Osbaldeston, 2000, IBIDIS PRESS cc.

http://www.cancerlynx.com/dioscorides.html. Dioscorides is chosen as it is known that Materia Medica was widely read in Europe for more than 1500 years, after its creation 50-70 CE.

Plants for a future: https://pfaf.org/user/Default.aspx

Medicinal Plants in Folk Tradition. An ethnobotany of Britain & Irland. David E. Allan & Gabrielle Hatfield. Timber Press 2004.

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