

# MIREN Rocks Frankenjura

## Species identification booklet

*Frankenjura*





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**Frankenjura**

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### Sources:

Plant photos by Flora Helvetica. 6th Edition

Plant Sketches by Rothmaler Exkursionsflora von Deutschland, Atlasband, 12th Edition 2013,  
Springer

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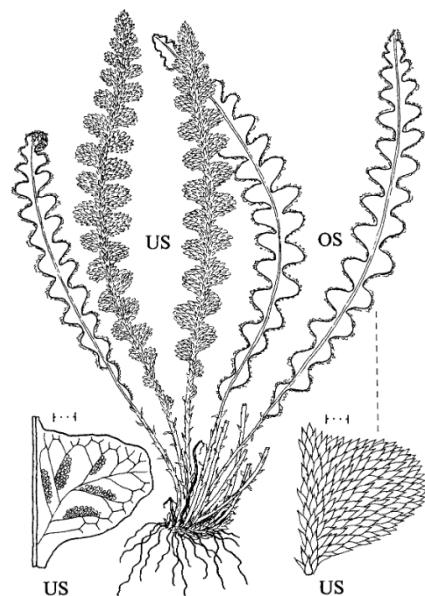
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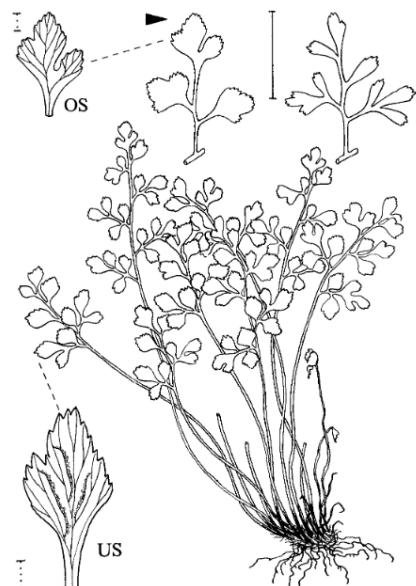
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*Asplenium ceterach* (Aspleniaceae) L.



Milzfarn – *Asplenium ceterach* 0,05–0,20  
2 6–8 ▽

*Asplenium ruta-muraria* (Aspleniaceae) L.

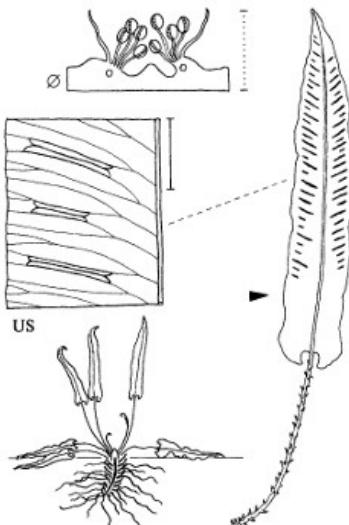


Mauer-Streifenfarn, Mauerraute –  
*Asplenium ruta-muraria* 0,03–0,15 2 7–9

*Asplenium scolopendrium* (Aspleniaceae) (L.) Newman *Phyllitis scolopendrium*



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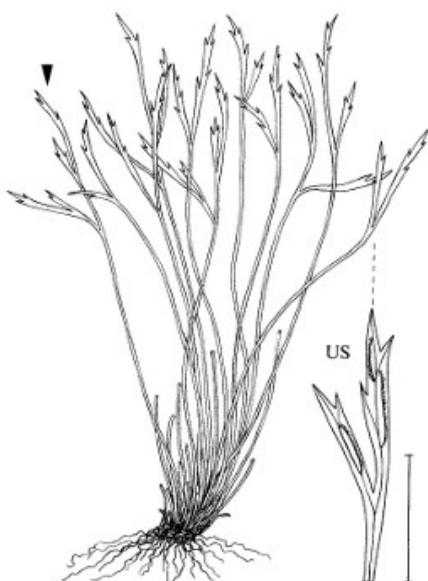


**Hirschzunge** – *Asplenium scolopendrium*  
0,15–0,50 ♂ 7–8 ▽ (Pfl immergrün)

*Asplenium septentrionale* (Aspleniaceae) (L.) Hoffm.



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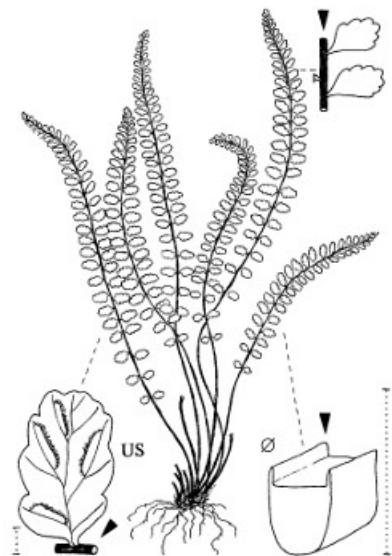


**Nördlicher Streifenfarn** – *Asplenium septentrionale* 0,08–0,15 ♂ 7–8

*Asplenium trichomanes* (Aspleniaceae) L.



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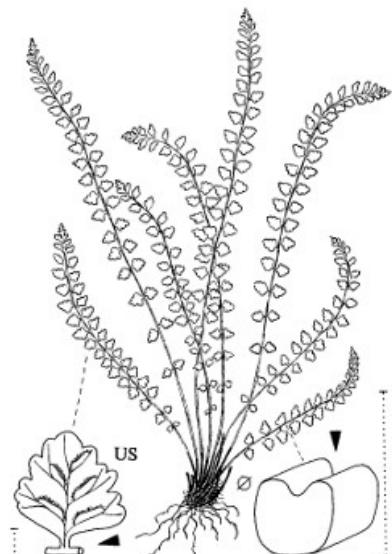


**\*\*Braunstieler St. – *A. trichomanes* s. l.**  
0,05–0,30 ♂ 7–8 (BlStiel u. Bl-Spindel bis  
zur Spitze braun)

*Asplenium viride* (Aspleniaceae) Huds.



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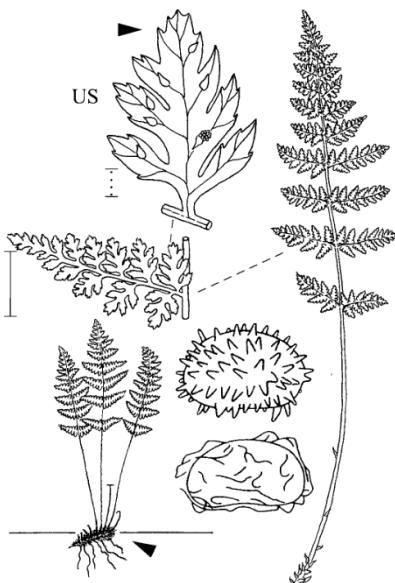


**Grünstieler Streifenfarn – *Asplenium***  
***viride*** 0,05–0,20 ♂ 7–8 (BlStiel nur am  
Grund braun)

*Cystopteris fragilis* (*Cystopteridaceae*) (L.) Bernh.



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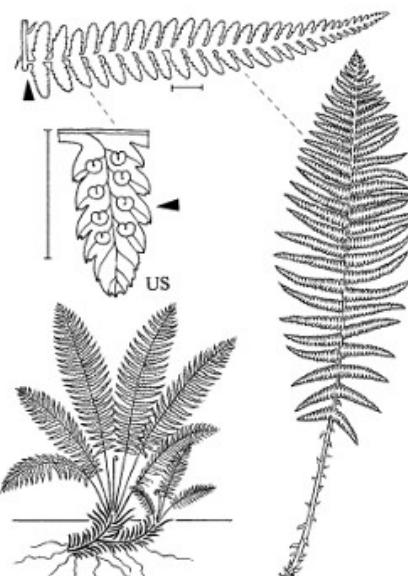


Zerbrechlicher B. – *C. fragilis* 0,10–0,50 24  
7–9; (Spore unten: Runzelsporiger B. – *C. dickieana*) ↗ S. 781

*Dryopteris filix-mas* (*Dryopteridaceae*) (L.) Schott



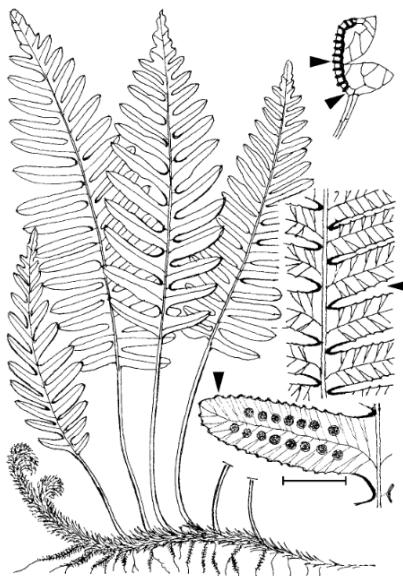
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Gewöhnlicher W. – *D. filix-mas* 0,30–1,20  
24 7–9

***Polypodium vulgare* (Polypodiaceae) L.**

Leaf blade 3.5 - 5 times longer than broad, spores ripen July-august



**Gewöhnlicher Tüpfelfarn – *Polypodium vulgare* 0,10–0,50 ♂ 8–9 (Sori schleierlos)**

***Polypodium interjectum* (Polypodiaceae) Shivas**

Leaf blade 1.5 - 2.5 (3) times longer than broad, spores ripen august-september



**Gesägter T. – *P. interjectum* 0,10–0,50 ♂ 9–10 (Sori schleierlos)**

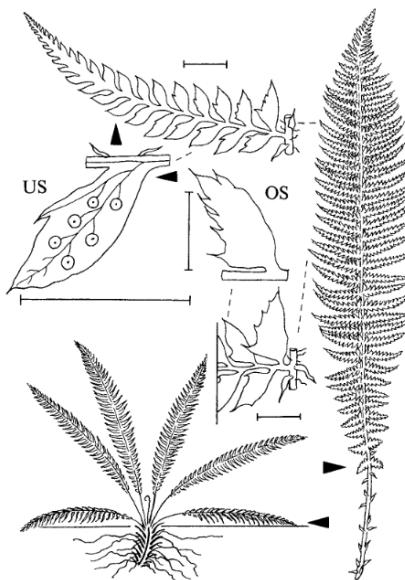
*Polystichum aculeatum* (Polypodiaceae) (L.) Roth



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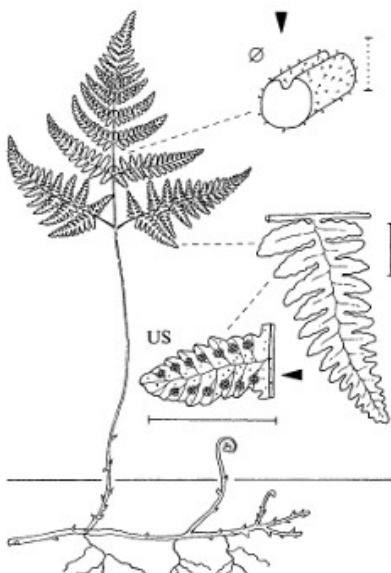


Dorniger Sch. – *P. aculeatum* 0,60–1,00 ♂  
8–9 ▽ (Bl ledrig, immergrün)

*Gymnocarpium robertianum* (Woodsiaceae) (Hoffm.) Newman



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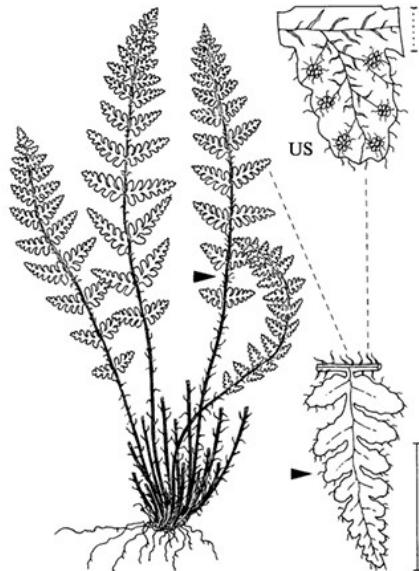


Ruprechtsfarn – *Gymnocarpium*  
*robertianum* 0,15–0,55 ♂ 7–8

*Woodia ilvensis* (Woodsiaceae) (L.) R. Br.



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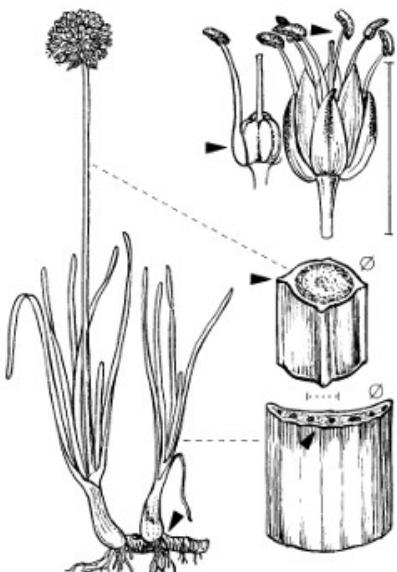


**Rostroter W.** – *W. ilvensis* 0,10–0,20 ♂  
7–8 ▽

*Allium lusitanicum* (Amaryllidaceae) Lam. *Allium senescens*

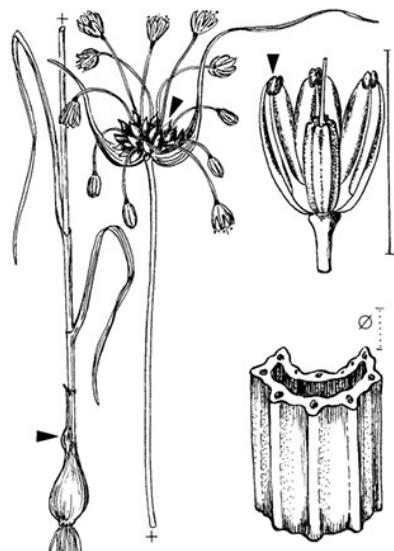


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**Berg-L.** – *A. lusitanicum* 0,15–0,30 ♂ 7–8  
▽ (lilapurpur. Ohne Blathäutchen)

*Allium oleraceum* (Amaryllidaceae) L.



Gemüse-Lauch – *Allium oleraceum*  
0,30–0,60 ♂ 7–8 (lilapurpur. Ohne  
Blathäutchen)

*Bupleurum falcatum* (Apiaceae) L. Subsp. *faclatum* for left image

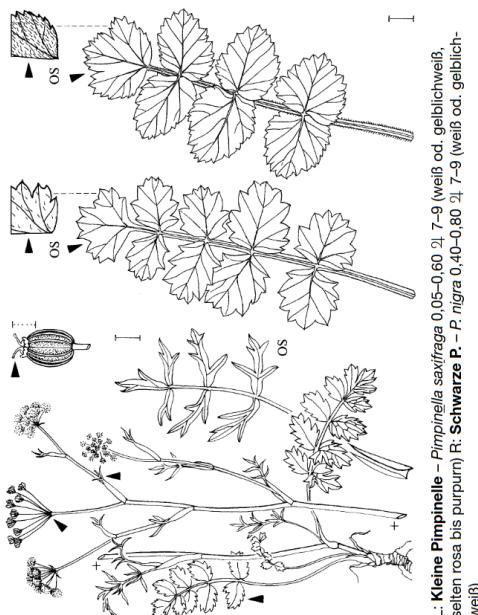


Sichel-H. – *B. falcatum* 0,20–1,00 ♂ 7–9  
(gelb)

*Pimpinella saxifraga* (Apiaceae) L.



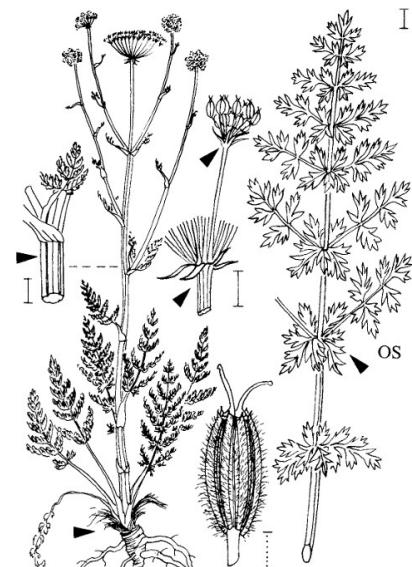
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*Seseli libanotis* (Apiaceae) (L.) W. D. J. Koch *Libanotis pyrenaica*



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Berg-Heilwurz – *Seseli libanotis* 0,60–1,20  
♂ 7–8 (weiß od. rötlich)

*Vincetoxicum hirundinaria* (Apocynaceae) Medik.



Weißer Schwalbenwurz – *Vincetoxicum hirundinaria* 0,30–1,40 ♂ 5–8 (gelblichweiß)

*Hedera helix* (Araliaceae) L.



Gewöhnlicher Efeu – *Hedera helix* 0,10–20,00 ♂ 9–11 (gelbgrün. Fr schwarz)

*Anthericum ramosum* (Asparagaceae) L.



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Ästige G. – *A. ramosum* 0,30–0,80 ♂ 6–8  
▽ (weiß)

*Artemisia campestris* (Asteraceae) L. Subsp. *campestris* for left image



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\*\*Feld-B. – *A. campestris* 0,30–0,60 ♀  
8–10 (gelb od. rötlich. Bl zuerst seidig  
behaart, verkahlend) ↗ S. 791

*Artemisia vulgaris* (Asteraceae) L.



Gewöhnlicher Beifuß – *A. vulgaris*  
0,60–1,50 ♂ 7–11 (gelblich od. rotbraun)

*Buphthalmum salicifolium* (Asteraceae) L.

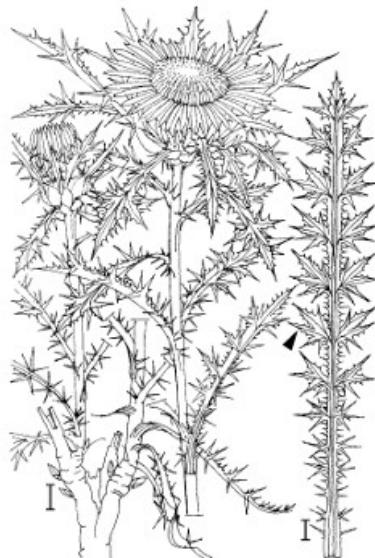


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Weidenblatt-Rindsauge – *Buphthalmum salicifolium* 0,15–0,70 ♂ 6–9 (goldgelb)

*Carlina acaulis* (Asteraceae) L. Subsp. *caulescens* for right image



Schmalblättrige Silberdistel – *Carlina acaulis* subsp. *caulescens* (0,03–)0,20–0,60  
⌚ 7–9 ▽

*Cota tinctoria* (Asteraceae) L. *Anthemis tinctoria*

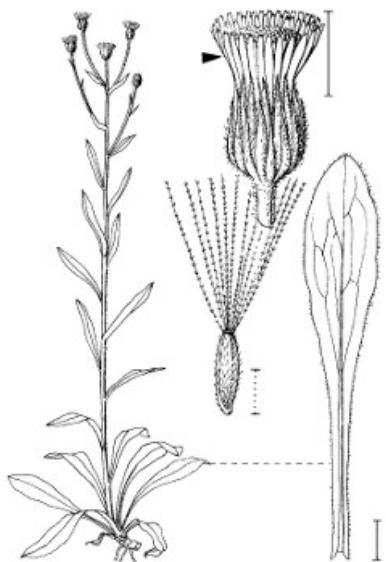


Färber-Hundskamille – *Anthemis tinctoria*  
0,30–0,60 ⌚ 6–9 (goldgelb, RöhrenB  
goldgelb)

*Erigeron acris ssp. acris* (Asteraceae) L. Left image not subspecies



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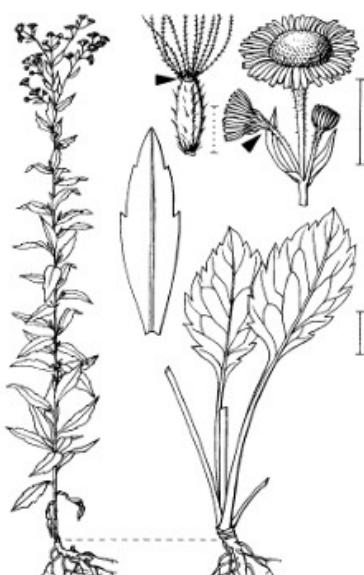


\*\*Scharfes B. – *E. acris* subsp. *acris*  
0,10–0,30 ♂ 2 (5–)6–7 (rötlich od. bläulich,  
RöhrenB gelb) ↗ S. 790

*Erigeron annuus ssp. annuus* (Asteraceae) (L.) Desf. Left image not subspecies



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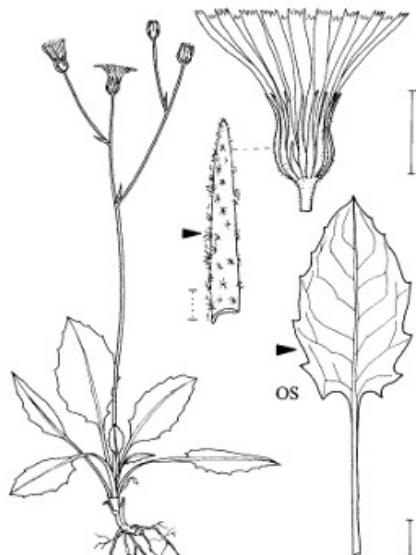


\*Feinstrahl-Berufkraut – *Erigeron annuus*  
0,50–1,00 ♂ 6–9 (weiß od. hellviolett,  
RöhrenB gelb) ↗ S. 790

*Hieracium bifidum* (Asteraceae)

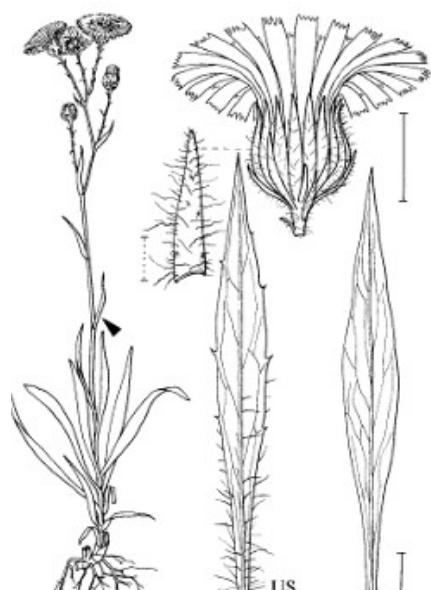
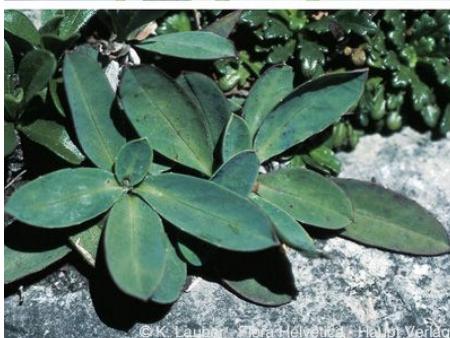


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\*Gabel-Habichtskraut – *Hieracium bifidum* 0,10–0,40 ♂ 5–7 (goldgelb. Bl grün bis blaugrün)

*Hieracium bupleuroides* (Asteraceae) C. C. Gmel.



\*Hasenohr-H. – *H. bupleuroides* 0,20–0,60 ♂ 7–8 (gelb. Bl blaugrün)

*Hieracium calodon* (Asteraceae) Tausch *Pilosella auriculoides*



*Hieracium franconicum* (Asteraceae) (Griseb.) Zahn



## *Hieracium harzianum* (Asteraceae) Zahn



© T. Muer

"Vulgate" type.

- Sheets 0, sit 1-3
- Sheets 5-10(-20), blue. green, lancettl. to br lancetly., coarsely 1-3-toothed, in the upper third completely margined.
- Overall inflorescence loosely panicled.
- Branches 5-10.
- Head peduncles scattered hairy, moderately hostile, up to abundant. flaky.
- Heads 10-30. bracts, blunt to pointed, hair and glands moderate, to richly flaky at the margins.

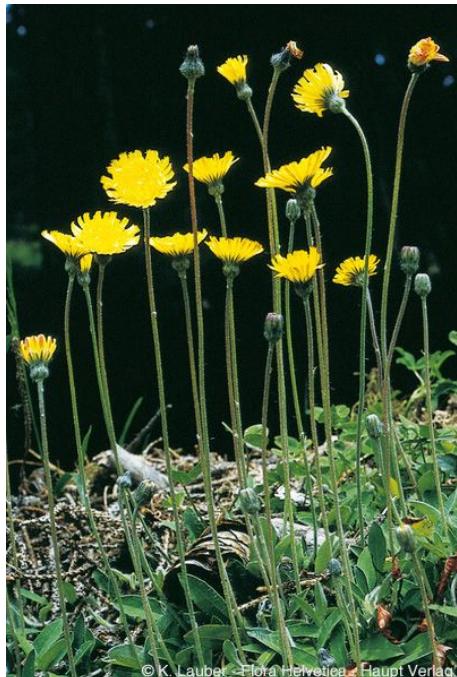
## *Hieracium murorum* agg. (Asteraceae) L.



\*Wald-H. – *H. murorum* 0,20-0,60 ♂ 5-8  
(gelb od. goldgelb)

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## *Hieracium pilosella* (Asteraceae) L. *Pilosella officinarum*



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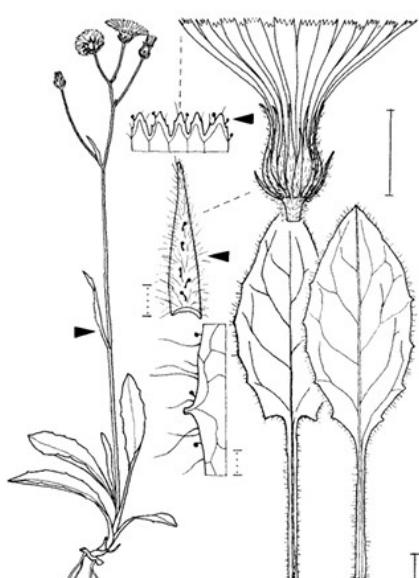


**Kleines Mausohrhabichtskraut – *Pilosella officinarum*** 0,05–0,30 ♂ 5–10 (schwefel-gelb, RandB usw. meist rotstreifig)

## *Hieracium schmidtii* (Asteraceae) agg.



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**\*Bleiches Habichtskraut – *Hieracium schmidtii*** 0,10–0,40 ♂ 5–7 (hellgelb. Bl blaugrün)

*Hieracium schneidii* (Asteraceae) Schack et Zahn



HERBARIUM MUSEI PARISIENSIS

*Lactuca perennis* (Asteraceae) L.



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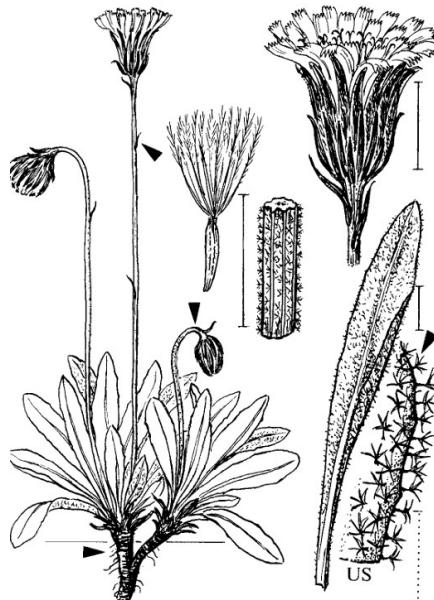


**Blauer L.** – *L. perennis* 0,30–0,50 2f 5–6  
(blau od. blauviolett. Bl blaugrün)

*Leontodon incanus* (Asteraceae) (L.) Schrank



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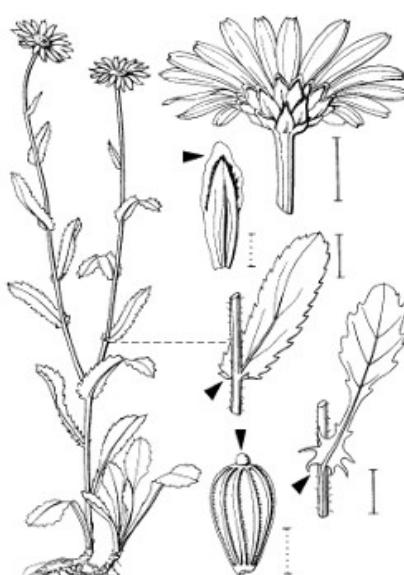
Grauer L. – *L. incanus* 0,15–0,45 2 5–6  
(goldgelb)

*Leucanthemum vulgare* (Asteraceae) L. *Leucanthemum ircutianum*



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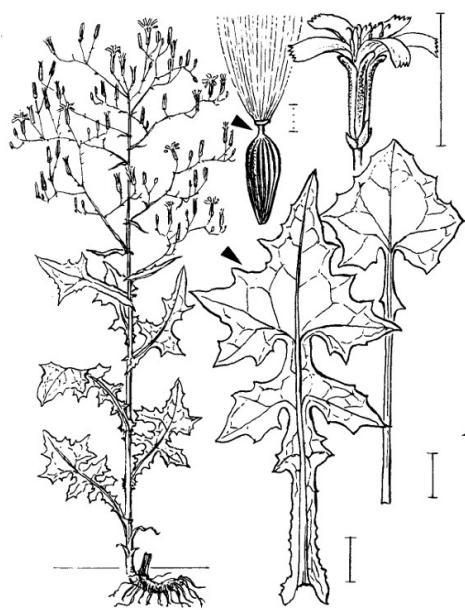


\*Wiesen-Margerite – *Leucanthemum ircutianum* 0,20–0,80 2 6(–10) (weiß,  
RöhrenB gelb) ▶ S. 791

*Mycelis muralis* (Asteraceae) (L.) Dumort.



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Gewöhnlicher Mauerlattich – *Mycelis muralis* 0,40–0,80 ♀ 7–8 (hellgelb)

*Impatiens parviflora* (Balsaminaceae) DC.

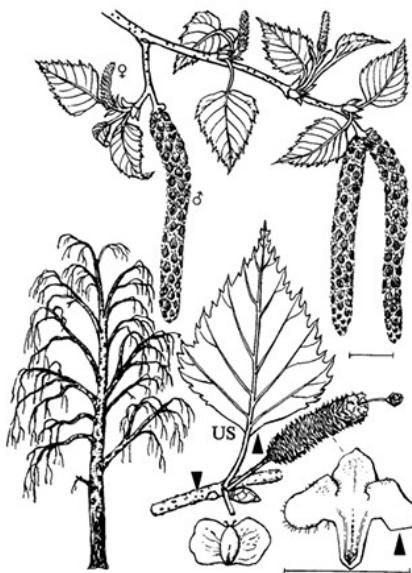


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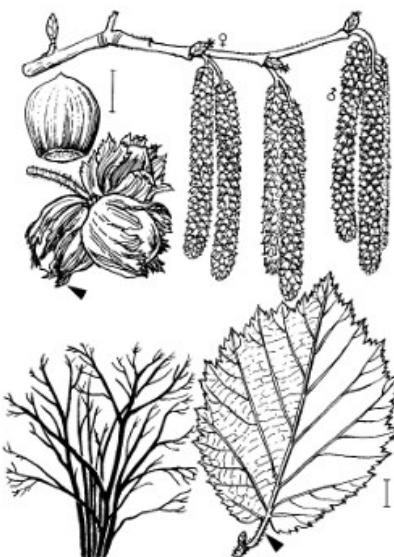
Kleinblütiges S. – *I. parviflora* 0,30–0,60  
⌚ 6–9 (gelb)

*Betula pendula* (Betulaceae) Roth



Gewöhnliche B. – *B. pendula* Bis 25,00 ♂  
4–5 (♂ hell bräunlichgelb, ♀ grün)

*Corylus avellana* (Betulaceae) L.



Gewöhnliche Hasel – *Corylus avellana*  
2,00–6,00 ♂, 2–4 (♀ grün, Narben rot,  
♂ grünlichgelb)

*Asperugo procumbens* (Boraginaceae) L.



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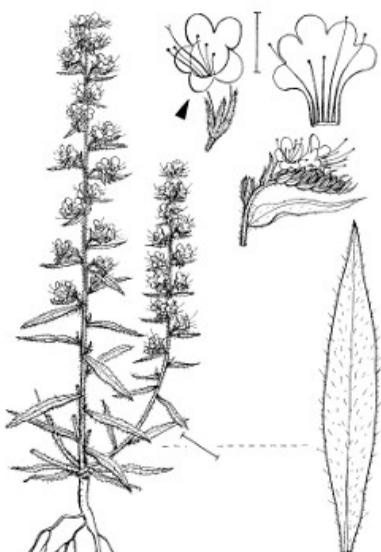


Schlängenäuglein – *Asperugo procumbens* 0,20–0,50 ♂ ① 5–8 (erst violett, dann blau, Schlundschuppen weiß)

*Echium vulgare* (Boraginaceae) L.



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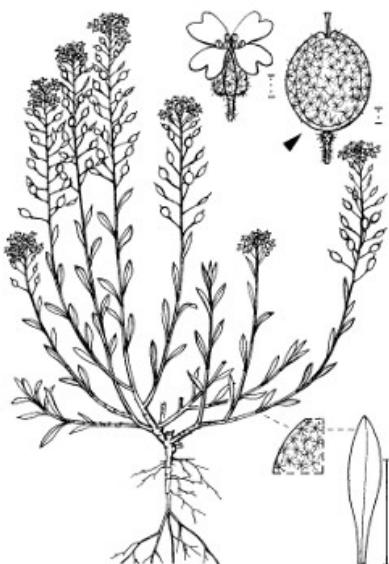


Gewöhnlicher Natternkopf – *Echium vulgare* 0,25–0,80 ♂ 5–10 (erst rosa, dann leuchtendblau)

*Alyssum montanum* (Brassicaceae) L.

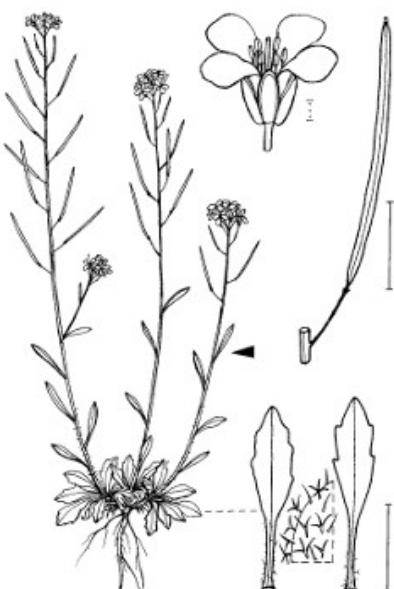


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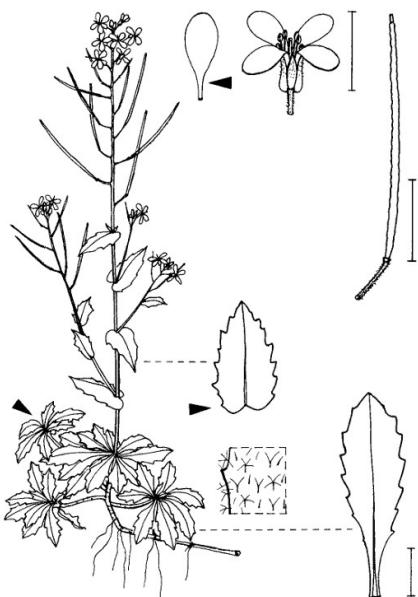
\*\*Berg-St. – *A. montanum* 0,10–0,20 ♂  
3–5 ▽ (goldgelb)

*Arabidopsis lyrata* subsp. *petraea* (Brassicaceae) L. *Cardaminopsis petraea*



Felsen-Sch. – *A. petraea* 0,10–0,25 ♂ 5–7  
(weiß)

*Arabis alpina* (Brassicaceae) L.



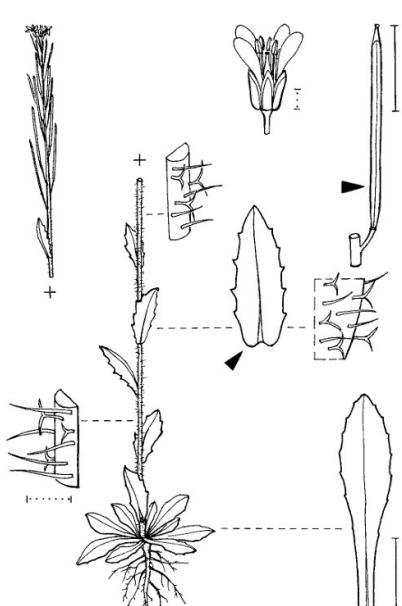
Alpen-G. – *A. alpina* 0,05–0,40 ♀ 3–10  
(weiß)

*Arabis hirsuta* (Brassicaceae) L.



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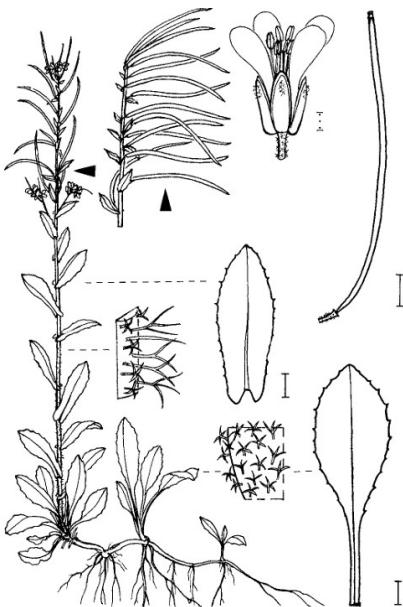


Behaarte G. – *A. hirsuta* 0,10–0,80 ☺ ♀ 5–7 (weiß)

*Arabis turrita* (Brassicaceae) L. *Pseudoturritis turrita*



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Turmgänsekresse – *Pseudoturritis turrita*  
0,10–0,70 ♂ 4–6 (gelblichweiß)

*Aurinia saxatilis* (Brassicaceae) (L.) Desv.



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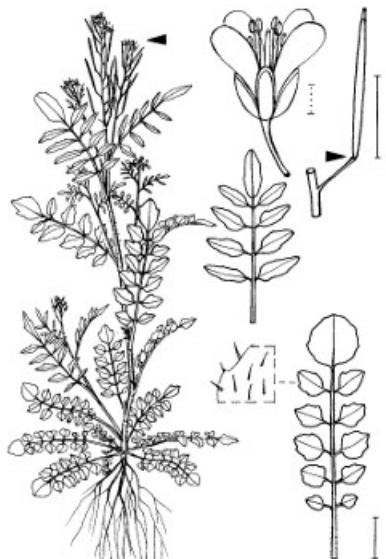


Felsensteinkraut – *Aurinia saxatile*  
0,15–0,35 h 4–5 ▽ (leuchtend gelb)

*Cardamine flexuosa* (Brassicaceae) With.



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**Wald-Sch.** – *C. flexuosa* 0,10–0,50 ♂ ① ♀ 4–10 (weiß)

*Cardamine impatiens* (Brassicaceae) L.

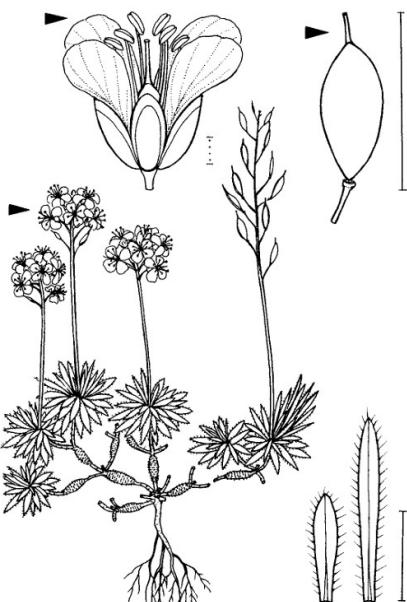
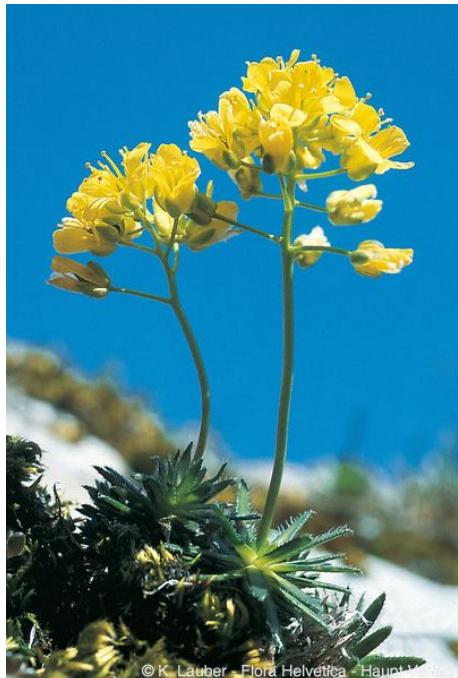


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**Spring-Schaumkraut** – *Cardamine impatiens* 0,10–0,85 ♂ ① ♀ 5–7 (Kr weiß, oft fehlend)

*Draba aizoides* (Brassicaceae) L.

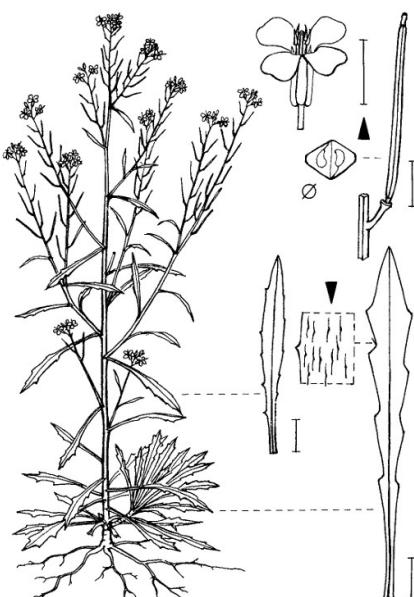


Immergrünes F. – *D. aizoides* 0,03–0,10 2<sup>4–8</sup> ▽ (goldgelb)

*Erysimum crepidifolium* (Brassicaceae) Rchb.



- Flower light yellow, ripe pods 0-40°, crown leafs 11-16 mm, stem **only** 2-parted hairs, leafs **mostly** 2-parted hairs
- Blüte hellgelb, reife Schoten 0-40°, Kronenblätter 11-16 mm, Stiel **nur** 2-teilig behaart, **Blätter meist 2-teilig behaart**

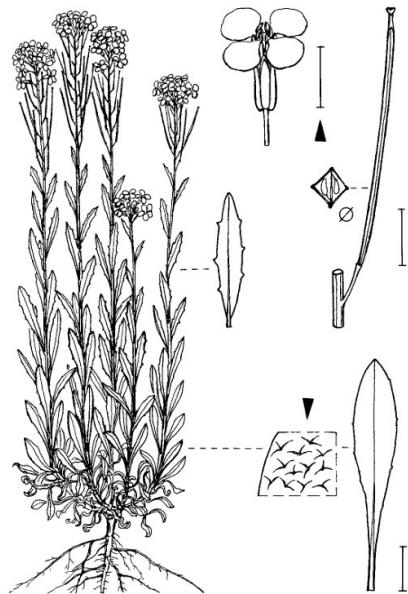


Bleicher Sch. – *E. crepidifolium* 0,15–0,80 ☺ ⊗ 4–6 (hellgelb)

*Erysimum odoratum (Brassicaceae)* Ehrh.



- Crown leafs 13-16 (20) mm, flower **dark yellow** with **strong scent**, pods 0-40°, stem mostly 2-parted but **few 3-parted hairs**, leafs mostly **3-parted hairs**
- Kronenblätter 13-16 (20) mm, Blüte **dunkelgelb** mit **starkem Duft**, Schoten 0-40°, Stängel meist 2-teilig, aber selten 3-teilig behaart, Blätter meist 3-teilig behaart

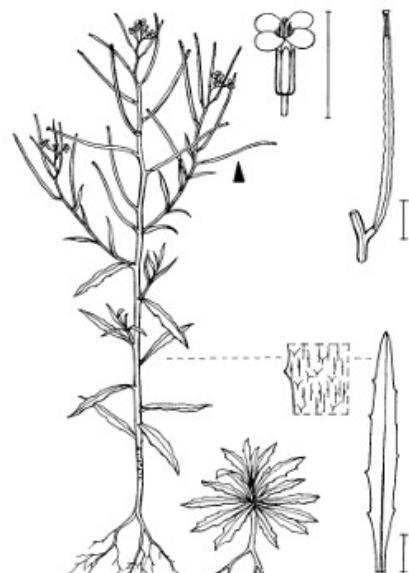


**Duft-Sch.** – *E. odoratum* 0,20–0,90 ① ☺  
5–7 (sattgelb, duftend)

*Erysimum repandum (Brassicaceae)* L.

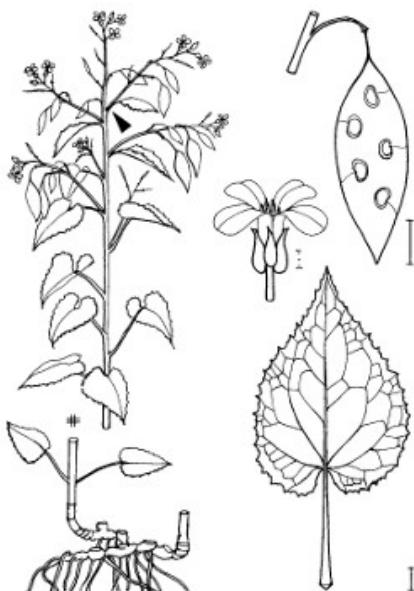


- Flower light yellow, ripe pods **horizontal** (40-90°), annual, **crown leafs 6-8 mm**, leafs with mainly 3-parted and 2-parted hairs
- Blüten hellgelb, reife Schoten **waagerecht** (40-90°), einjährig, **Kronenblätter 6-8 mm**, Blätter mit überwiegend 3-teiligen und 2-teiligen Haaren



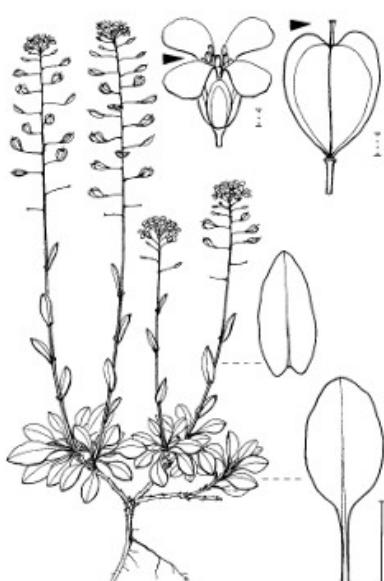
**Spreiz-Sch.** – *E. repandum* 0,15–0,35 ☺  
3–6 (hellgelb)

*Lunaria rediviva* (Brassicaceae) L.



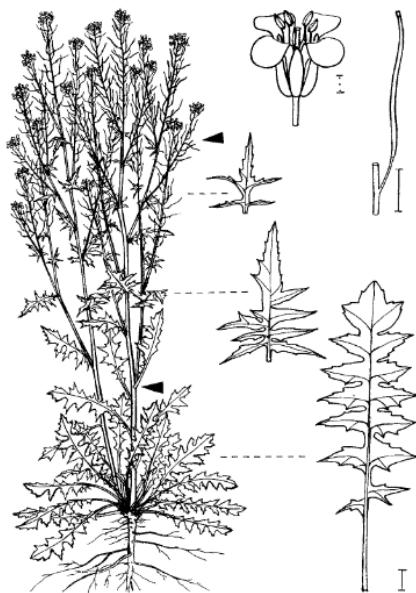
Ausdauerndes S. – *L. rediviva* 0,30–1,40  
2 5–7 ▽ (hellviolettbl. bis weißlich)

*Noccea montana* (Brassicaceae) (L.) F.K.Mey. *Thlaspi montanum*



Berg-T. – *N. montana* 0,10–0,20 2 4–5  
(weiß, Staubbeutel gelb bleibend)

*Sisymbrium austriacum* (Brassicaceae) Jacq.



Österreichische R. – *S. austriacum*  
0,30–0,60 ♂ 5–6 (goldgelb)

*Campanula gentilis* (Campanulaceae) Kovanda



Very similar to *C. rotundifolia*.

Differences:

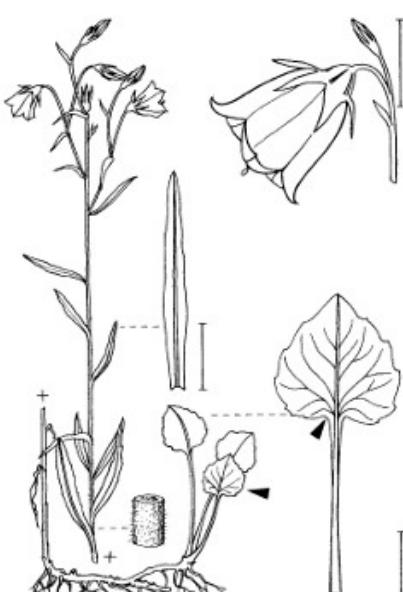
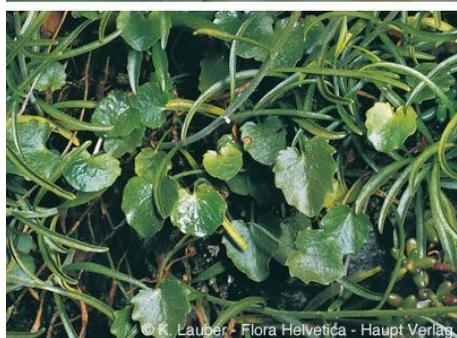
- Most **stem leafs** mostly in **lower third of stem** (*rotundifolia*: all over)
- Upper leafs threadlike (*rotundifolia*: linealistic)
- Stem with **very few or 1 flower** (*rotundifolia*: several flowers)

## *Campanula persicifolia* (Campanulaceae) L.



Pfirsichblättrige G. – *C. persicifolia*  
0,30–0,80 ♂ 6–9 (hellblau, selten weiß)

## *Campanula rotundifolia* (Campanulaceae) L.

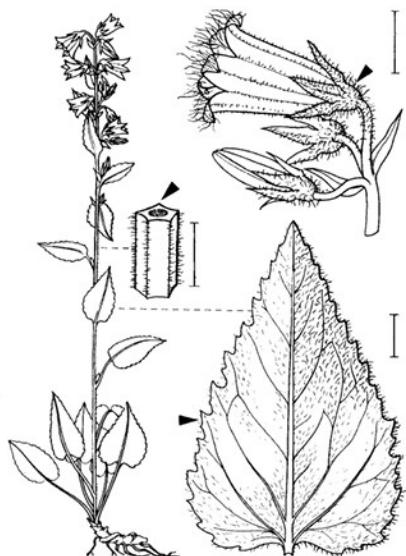


\*Rundblättrige G. – *C. rotundifolia*  
0,10–0,30 ♂ 6–10 (blauviolett)

*Campanula trachelium* (Campanulaceae) L.



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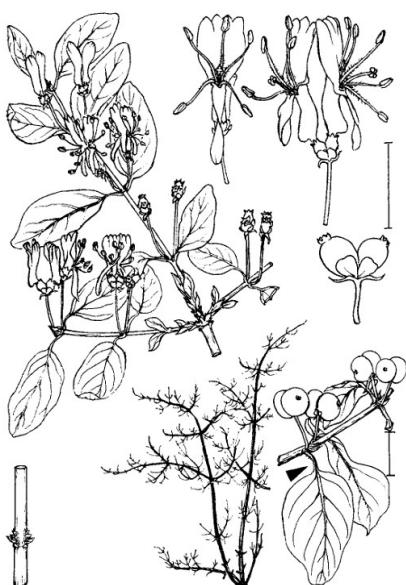


Nesselblättrige Glockenblume –  
*Campanula trachelium* 0,60–1,00 ♂ 7–8  
(hell blauviolett bis hellblau)

*Lonicera xylosteum* (Caprifoliaceae) L.



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rote Heckenkirsche – *L. xylosteum*  
1,00–2,00 ♂ 5–6 (gelblichweiß, später  
mattgelb. Fr scharlachrot)

*Cerastium arvense* (*Caryophyllaceae*) L. Subsp. Arvense



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\*\*Acker-H. – *C. arvense* 0,03–0,30 ♀ 4–8  
(weiß. Pfl grauflaumig)

*Arenaria serpyllifolia* (*Caryophyllaceae*) L.

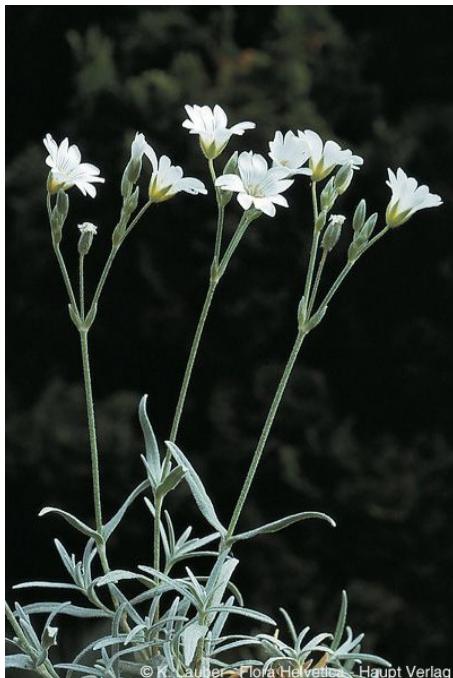


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\*\*Quendel-Sandkraut – *Arenaria serpyllifolia* 0,03–0,30 ♂ ⊖ 5–9 (weiß. Pfl graugrün) ↗ S. 786

*Cerastium tomentosum* (Caryophyllaceae) L.



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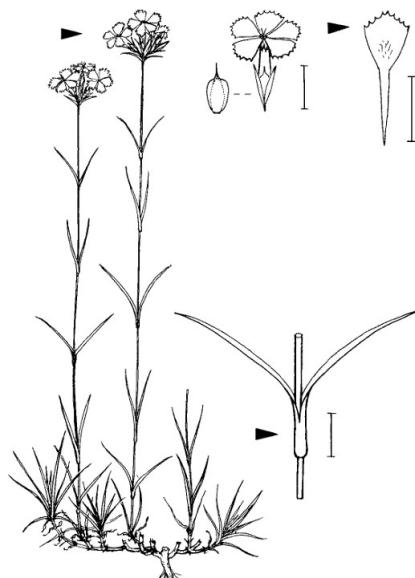


**Filziges H. – *C. tomentosum*** 0,15–0,30 ♀  
5–7 (weiß. Pfl dicht weißfilzig)

*Dianthus carthusianorum* (Caryophyllaceae) L. Subsp. *Carthusianorum*



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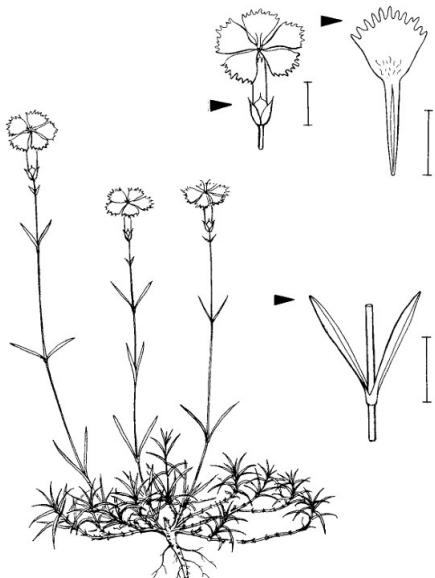


**Kartäuser-N. – *D. carthusianorum***  
0,15–0,45 ♀ 6–9 ▽ (dunkelpurpur bis  
rosa, dunkler geadert)

*Dianthus gratianopolitanus* (Caryophyllaceae) vill.



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Pfingst-Nelke – *Dianthus gratianopolitanus*  
0,10–0,25 ♂ 5–6 ▽ (hellpurpur, ohne  
Zeichnung. Bl blaugrün)

*Moehringia muscosa* (Caryophyllaceae) L.



Moos-N. – *M. muscosa* 0,05–0,20 ♂ 5–9  
(weiß)

*Moehringia trinervia* (Caryophyllaceae) (L.) Clairv.



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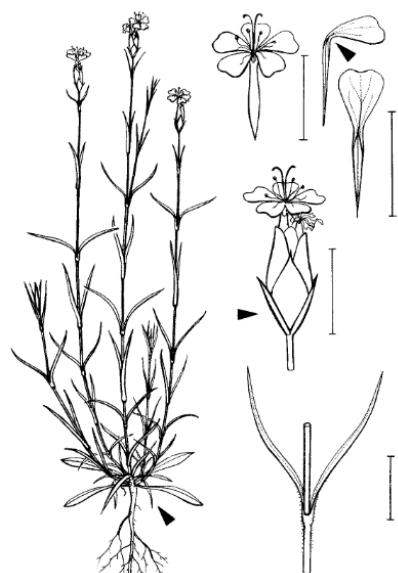


Dreinervige Nabelmiere – *Moehringia trinervia* 0,10–0,30 ♂ 5–7 (weiß)

*Petrorhagia prolifera* (Caryophyllaceae) (L.) P.W.Ball & Heywood

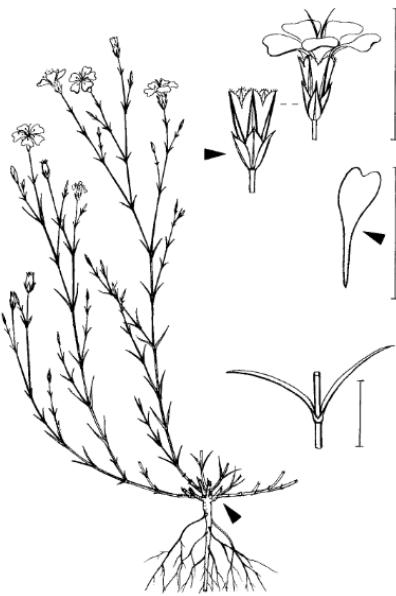


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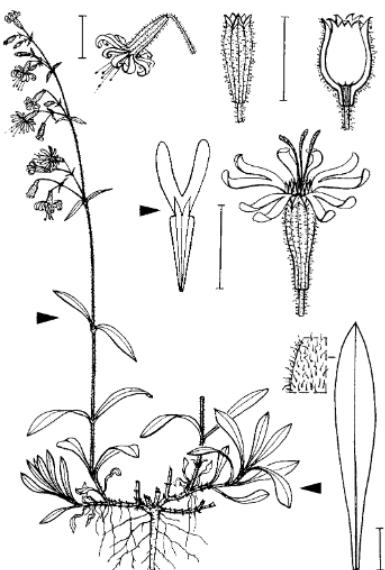
Sprossendes Nelkenköpfchen – *Petrorhagia prolifera* 0,15–0,45 ♂ ⊖ 6–10 (rosa)

*Petrorhagia saxifraga* (Caryophyllaceae) (L.) Link



Felsennelke – *P. saxifraga* 0,10–0,35 ♂  
6–9 (helllila bis sattrosa, dunkler geadert)

*Silene nutans* (Caryophyllaceae) L.

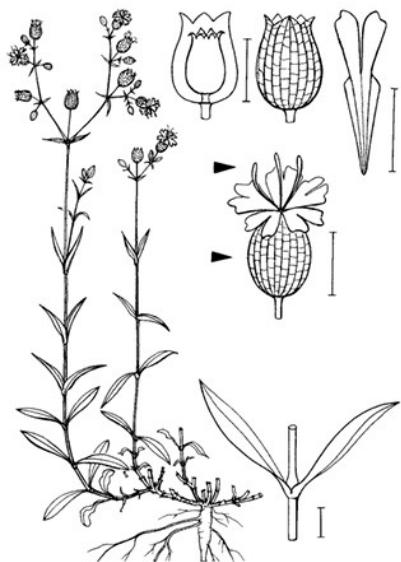


Nickendes L. – *S. nutans* 0,30–0,50 ♂ 5–8  
(weiß, USeite oft grünlich od. rötlich, nur  
nachts geöffnet)

*Silene vulgaris* (Caryophyllaceae) (Moench) Gärcke



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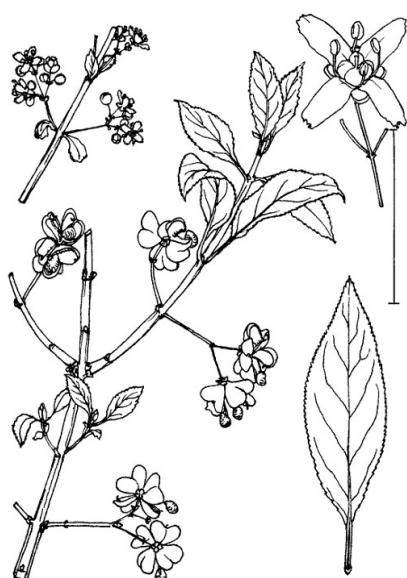


**\*\*Gewöhnliches Leimkraut – *S. vulgaris***  
0,10–0,60 ♂ 6–9 (weiß. K grünlichweiß od.  
rötlich. Pfl blaugrün)

*Euonymus europaeus* (Celastraceae) L.



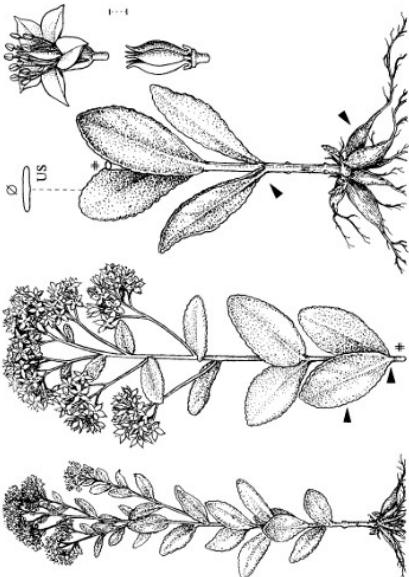
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**Europäisches Pfaffenhütchen – *Euonymus europaeus***  
1,50–3,00 ♂ 5–6  
(hellgrün. Fr rosa, SaMantel orange)

# *Hylotelephium maximum* (Crassulaceae) (L.) Kirsch.

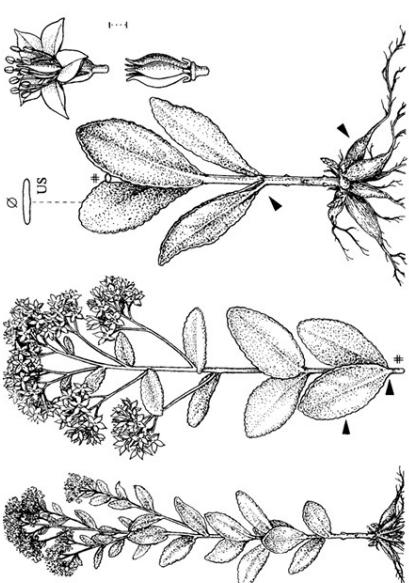
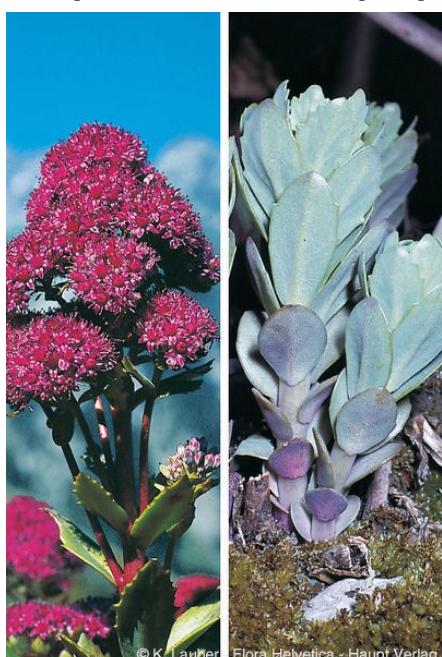
*Sedum telephium* subsp. *maximum*



**Große W.** – *H. maximum* 0,30–0,80  $\ddagger$  7–9 (grünlich, selten röthich). Ähnlich Purpur-F. –  
*H. telephium* (B) rosa bis dunkelrot. Blattgrün kalkförmig verschmälert, alle  
 Bl wachselfeinständig

# *Hylotelephium telephium* (Crassulaceae) (L.) H. Ohba.

*Sedum telephium*, *Sedum maximum* Subsp. *telephium* for image 1

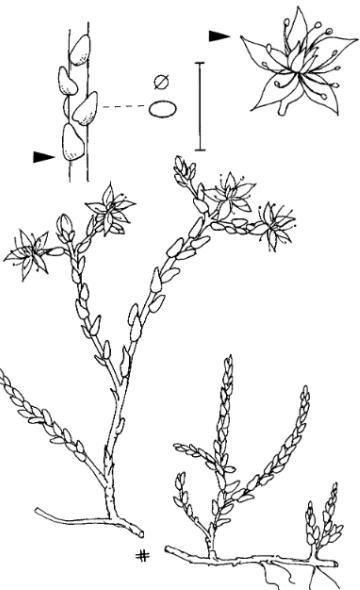


**Große W.** – *H. maximum* 0,30–0,80  $\ddagger$  7–9 (grünlich, selten röthich). Ähnlich Purpur-F. –  
*H. telephium* (B) rosa bis dunkelrot. Blattgrün kalkförmig verschmälert, alle  
 Bl wachselfeinständig

*Sedum acre* (Crassulaceae) L.



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**Scharfer Mauerpfeffer – *Sedum acre***  
0,03–0,15 2l 6–8 (gelb)

*Sedum album* (Crassulaceae) L.

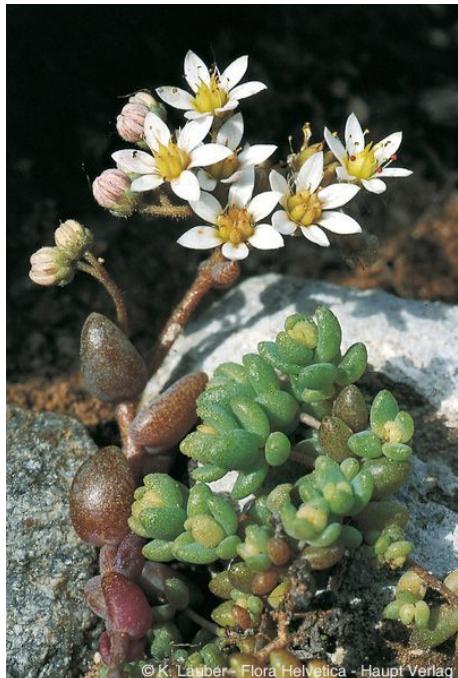


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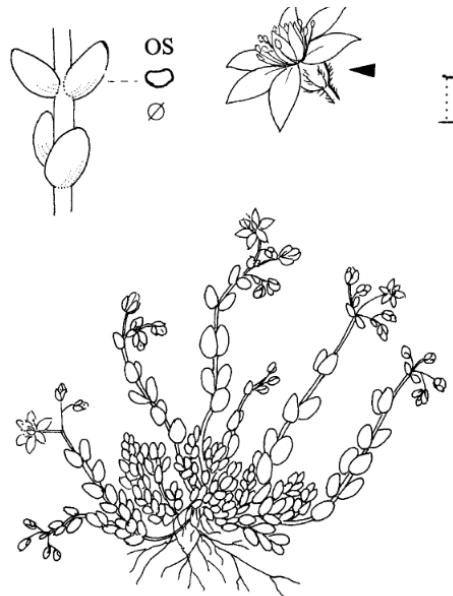


**Weiße F. – *S. album*** 0,08–0,20 2l 6–9  
(weiß)

*Sedum dasyphyllum* (Crassulaceae) L.



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Buckel-F. – *S. dasyphyllum* 0,03–0,10 2  
6–8 (weiß, außen zuweilen rötlich)

*Sedum rupestre* (Crassulaceae) L. *Sedum reflexum*



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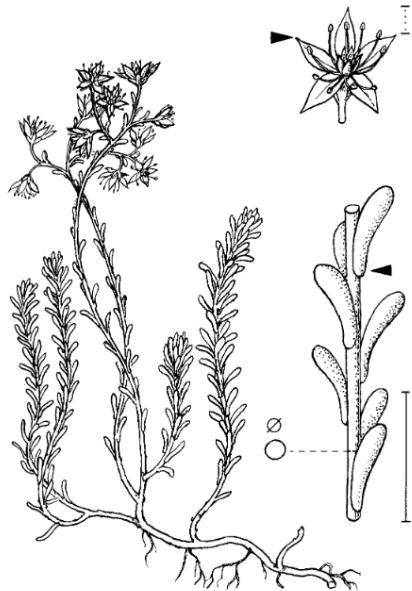


\*Felsen-Fetthenne – *Sedum rupestre*  
0,10–0,35 2 6–8 (gelb) ✕ S. 784

*Sedum sexangulare* (Crassulaceae) L.



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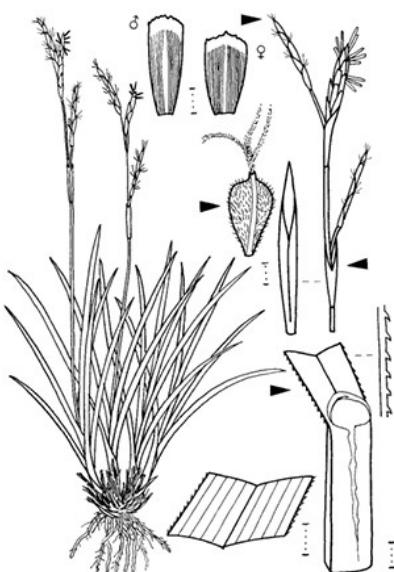


Milder M. – *S. sexangulare* 0,05–0,15 ♂  
6–7 (gelb)

*Carex digitata* (Cyperaceae) L.



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Finger-S. – *C. digitata* 0,10–0,30 ♂ 5  
(Sp rotbraun, grün gekielt, weißrandig.  
Pfl unten dunkelrot)

*Carex flacca* (*Cyperaceae*) Schreber



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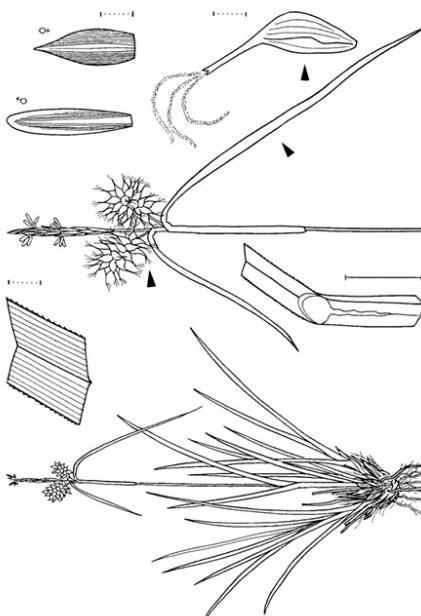


Blaugrüne S. – *C. flacca* 0,20–0,60 ♂ 5–7  
(Sp schwarzbraun, Schläuche grün od.  
schwarz)

*Carex flava* (*Cyperaceae*) L. s. str.



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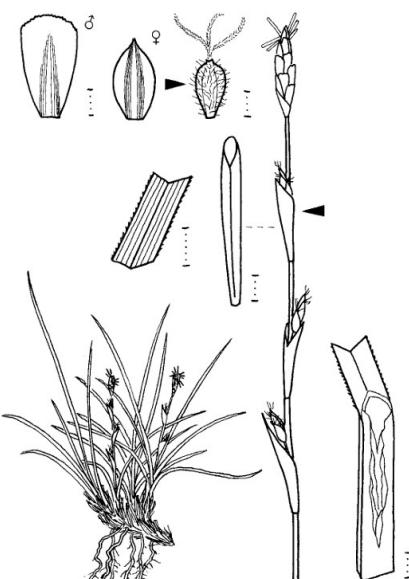


Gelb-Segge – *Carex flava* 0,20–0,60 ♂ 5–9 (Sp gelb- bis rostbraun, Pfl. gelbgrün)  
Schläuche hellgrün, Pfl. gelbgrün

*Carex humilis* (Cyperaceae) Leyss.



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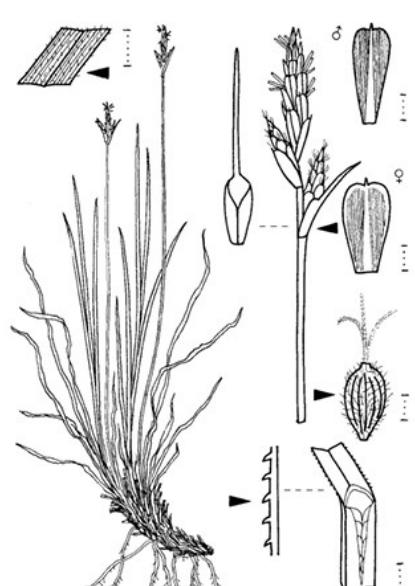


Erd-S. – *C. humilis* 0,03–0,15 ♂ 4–5  
(Sp braun, weißrandig. Pfl unten rot. Bl  
graugrün)

*Carex montana* (Cyperaceae) L.



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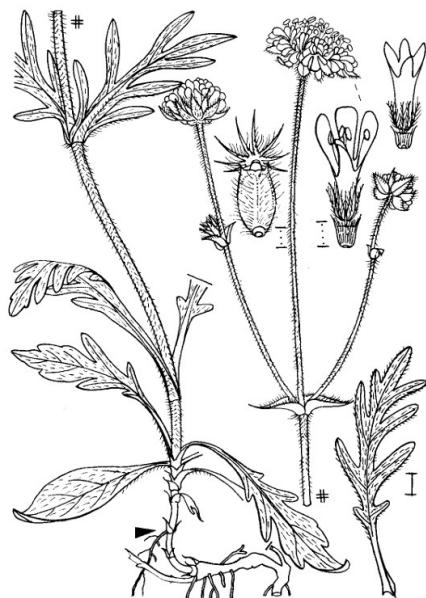


Berg-S. – *C. montana* 0,10–0,30 ♂ 3–5  
(Sp braun, Schläuche grün, oben oft braun.  
Pfl unten rot)

*Knautia arvensis* (*Dipsacaceae*) (L.) Coult.



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\*Acker-Witwenblume – *Knautia arvensis*  
0,30–0,80 ♂ 7–8 (bläulichrot bis violett)

*Scabiosa columbaria* (*Dipsacaceae*) L.

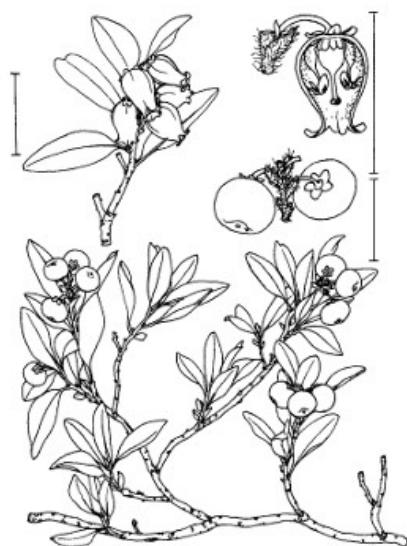


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Tauben-S. – *S. columbaria* 0,25–0,60 ♂  
7–11 (blaulila, KBorsten schwärzlich)

*Arctostaphylos uva-ursi (Ericaceae)* L.



**Echte Bärentraube – *Arctostaphylos uva-ursi*** 0,20–0,60 ♂ 3–7 ▽ (weiß bis rosa, KrZipfel rötlich. Fr rot)

*Euphorbia cyparissias (Euphorbiaceae)* L.



**Zypressen-Wolfsmilch – *Euphorbia cyparissias*** 0,15–0,30 ♀ 4–5 (grünlichgelb, später rötend)

*Anthyllis vulneraria* (Fabaceae) L.



**\*Gewöhnlicher Wundklee – *Anthyllis vulneraria* 0,05–0,60(–0,90) ⚡ 5–8 (gelb, weißlich od. rötlich)**

*Coronilla vaginalis* (Fabaceae) Lam.

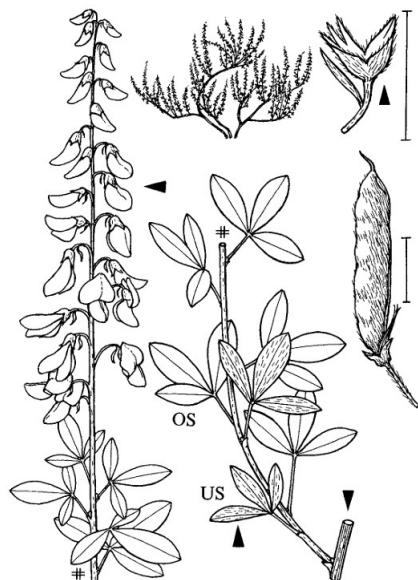


**Scheiden-Kronwicke – *Coronilla vaginalis* 0,05–0,10 h 5–7 (gelb)**

*Cytisus nigricans* (Fabaceae) L.



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**Schwarzwerdender Geißklee – *Cytisus nigricans*** 0,30–1,20 h ♂ 6–8 (gelb. Bl trocken schwarz)

*Hippocrepis comosa* (Fabaceae) L.



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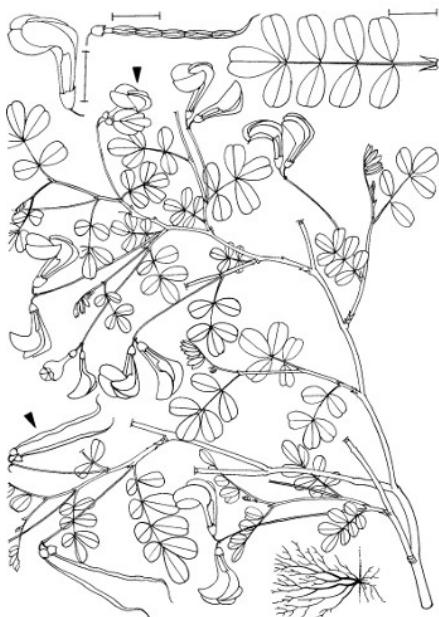
**Hufeisenklee – *H. comosa*** 0,08–0,25 ♀ h 5–7 (gelb)

*Hippocrepis emerus* (Fabaceae) L.

Subsp. Lassen

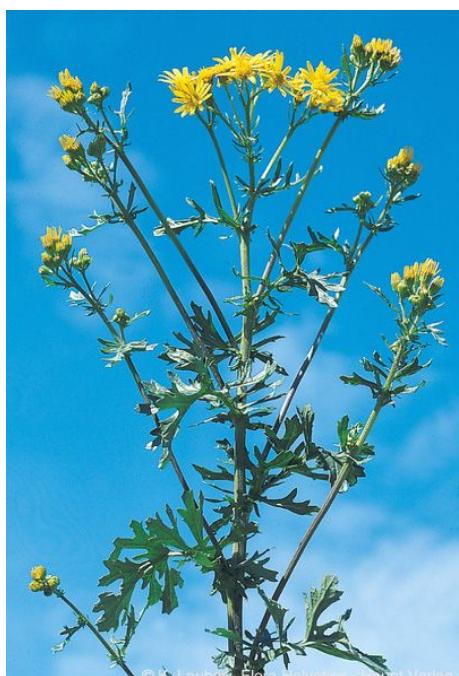


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Strauchwicke – *Hippocrepis emerus* 1,00–2,00 ♂, 5–7 (gelb)

*Jacobaea vulgaris* (Fabaceae) L. *Senecio jacobaea*



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\*\*Jakobs-G. – *S. jacobaea* 0,30–1,00 ☺ ☺  
♀ 7–9 (goldgelb) ✸ S. 790

*Lathyrus vernus* (*Fabaceae*) (L.) Bernh. Subsp. *Vernus*

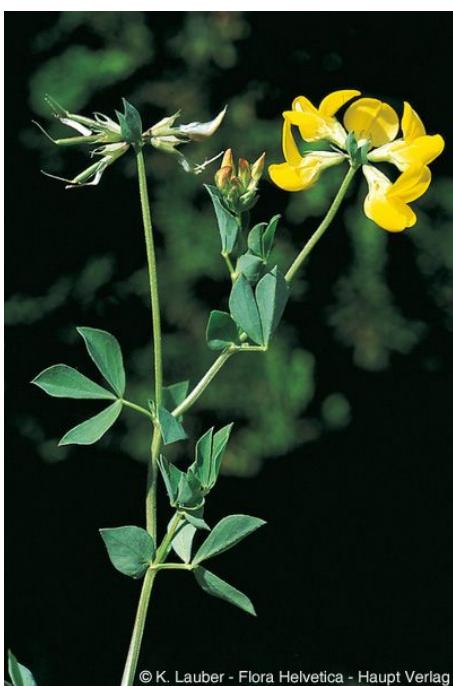


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Frühlings-P. – *L. vernus* 0,20–0,40 ♂ 4–5  
(purpur, später blaugrün)

*Lotus corniculatus* (*Fabaceae*) L.



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\*Gewöhnlicher H. – *L. corniculatus*  
0,20–0,30(–0,50) ♂ 6–8 (gelb, außen ± rot  
gezeichnet, getrocknet grünlich) ↗ S. 785

*Medicago lupulina* (Fabaceae) L.



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Hopfen-Luzerne – *Medicago lupulina*  
0,15–0,60 ♂ bis ♀ 5–10 (gelb)

*Fagus sylvatica* (Fagaceae) L.

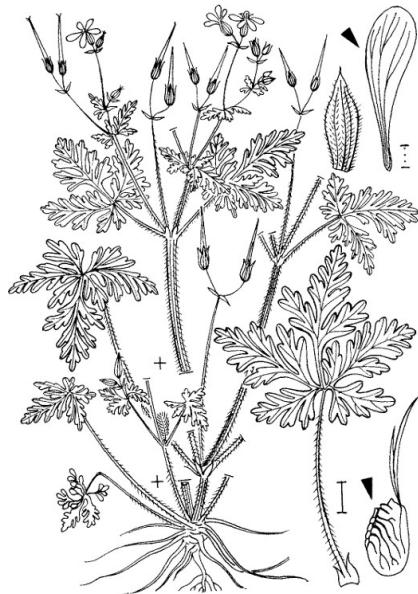


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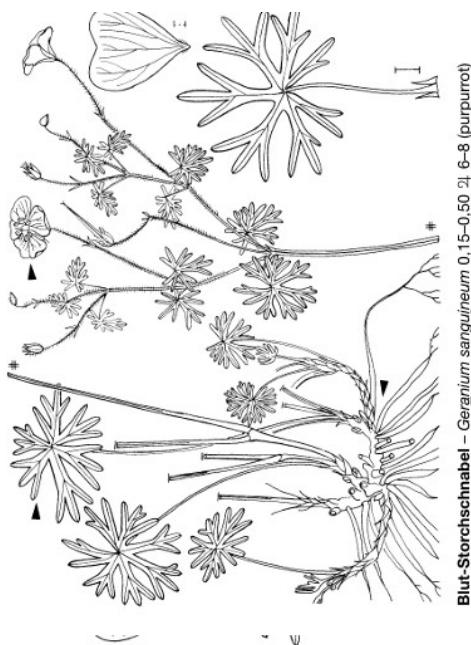
Rot-Buche – *Fagus sylvatica* Bis 40,00 ♂  
4–5 (rötlichbraun)

*Geranium robertianum* (Geraniaceae) L. Subsp. Robertianum



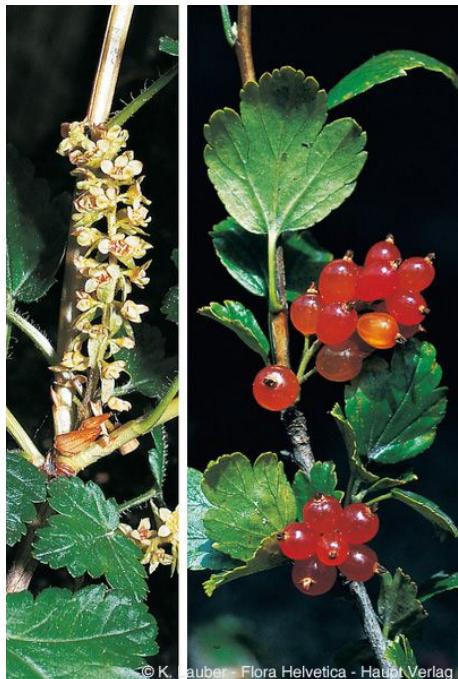
\*\*Stinkender St. – *G. robertianum*  
0,20–0,40 ♂ Ⓛ 5–10 (hellpurpur)

*Geranium sanguineum* (Geraniaceae) L.



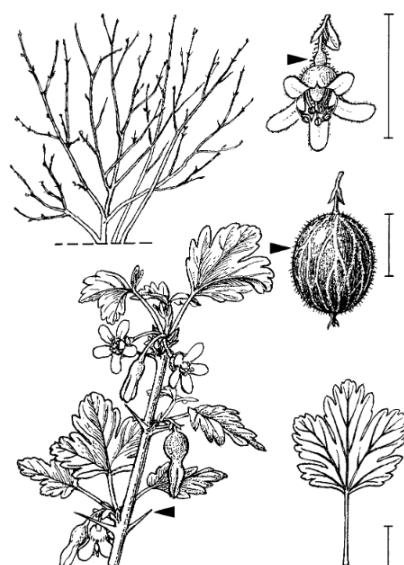
Blut-Storchschnabel – *Geranium sanguineum* 0,15–0,50 ♂ 6–8 (purpurrot)

## *Ribes alpinum* (Grossulariaceae) L.



**Alpen-Johannisbeere – *Ribes alpinum***  
0,80–1,50 ₋ 4–5 (grünlichgelb, unvollkommen zweihäusig. Fr rot)

## *Ribes uva-crispa* (Grossulariaceae) L.

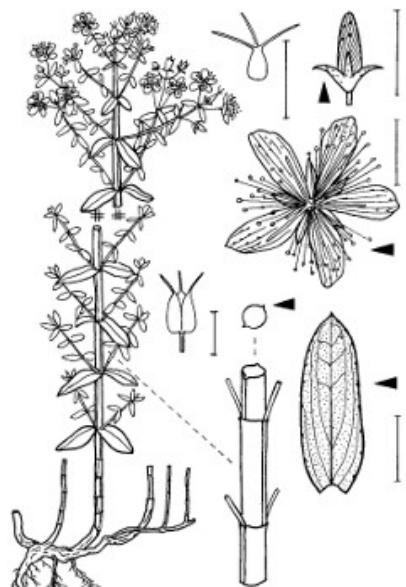


**Stachelbeere – *Ribes uva-crispa*** 0,60–1,20  
₦ 4–5 (grünlichgelb. Fr grün, gelb od.  
purpurn)

*Hypericum perforatum* (*Hypericaceae*) L. Subsp. *Perforatum*



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\*\*Tüpfel-H. – *H. perforatum* 0,15–0,80 ♂  
6–8 (goldgelb, wie KBI schwarz punktiert)

*Acinos arvensis* (*Lamiaceae*)



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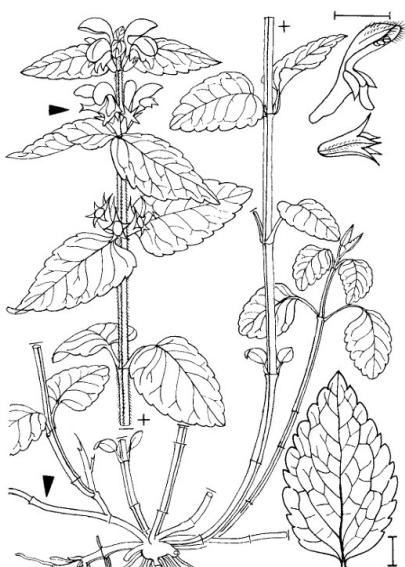
Gewöhnlicher S. – *A. arvensis* 0,10–0,30  
♂ ⊖ 6–9 (blässlila)

*Ajuga genevensis* (Lamiaceae) L.



*Galeobdolon luteum* (Lamiaceae) L. *Lamium galeobdolon*

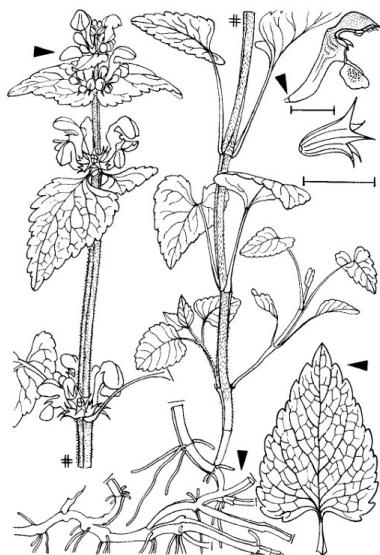
*Lamium galeobdolon* (L.) L. subsp. *galeobdolon*



*Lamium maculatum* (Lamiaceae) L.



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Gefleckte T. – *L. maculatum* 0,15–0,60 ♂  
4–9 (purpurn)

*Origanum vulgare* (Lamiaceae) L.



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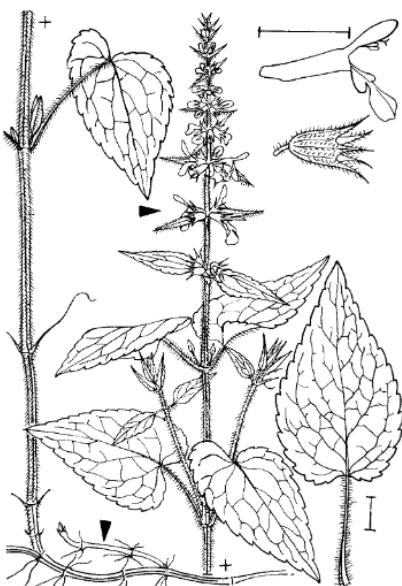


\*\*Gewöhnlicher Dost – *Origanum vulgare*  
0,20–0,60 ♂ 7–9 (hellpurpurn, selten weiß)  
↗ S. 788

*Stachys sylvatica* (Lamiaceae) L.



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**Wald-Z.** – *S. sylvatica* 0,30–1,00 ♂ 6–9  
(dunkel braunrot)

*Teucrium botrys* (Lamiaceae) L.



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**Trauben-Gamander** – *Teucrium botrys*  
0,10–0,40 ♂ ♂? 7–9 (rötlich)

*Teucrium chamaedrys* (Lamiaceae) L.



**Edel-Gamander** – *Teucrium chamaedrys*  
0,10–0,30 h 7–9 (hellpurpur)

*Teucrium montanum* (Lamiaceae) L.

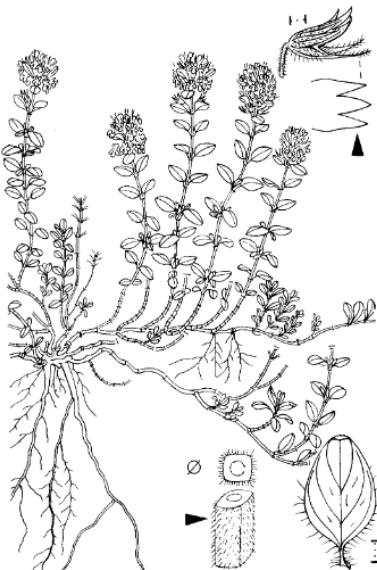


**Berg-G.** – *T. montanum* 0,05–0,35 h 6–9  
(hellgelb)

## *Thymus praecox* subsp. *praecox* (Lamiaceae)

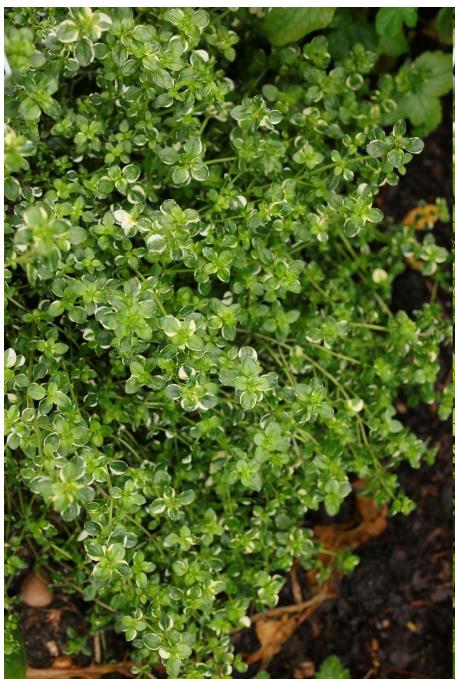


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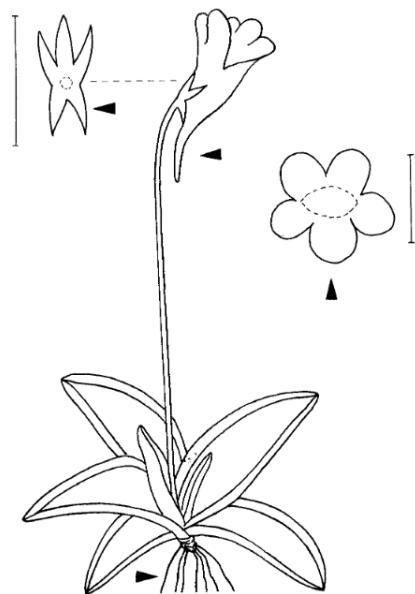
\*\*Frühblühender Th. – *Th. praecox*  
0,03–0,15 h 5–7 (hell- bis dunkelpurpur)  
↗ S. 788

## *Thymus pulegioides* (Lamiaceae) L.



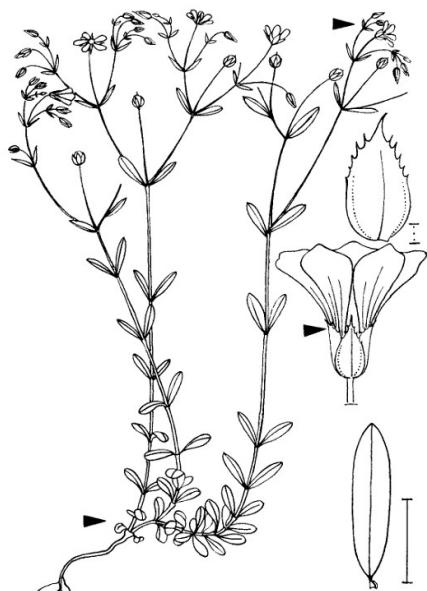
\*Arznei-Th. – *Th. pulegioides* 0,05–0,30 h  
6–9 (hell- bis dunkelpurpur) ↗ S. 788

*Pinguicula vulgaris* (Lentibulariaceae) L.



Echtes F. – *P. vulgaris* 0,05–0,15 ♂ 5–6 ▽  
(violettblau)

*Linum catharticum* (Linaceae) L.

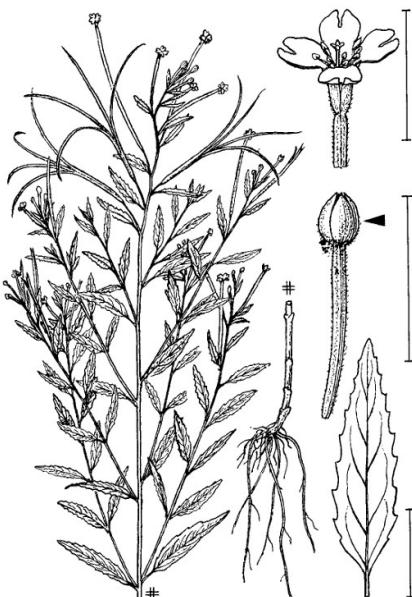


Purgier-Lein – *Linum catharticum*  
0,05–0,30 ☺ 6–7 (weiß, Grund gelb)

*Epilobium collinum* (Onagraceae) C. C. Gmel.



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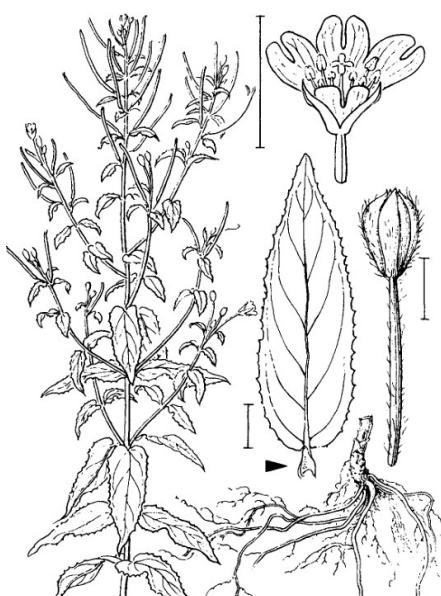


Hügel-W. – *E. collinum* 0,10–0,40 ♂ 6–9  
(rosa. Stg graugrün)

*Epilobium montanum* (Onagraceae) L.

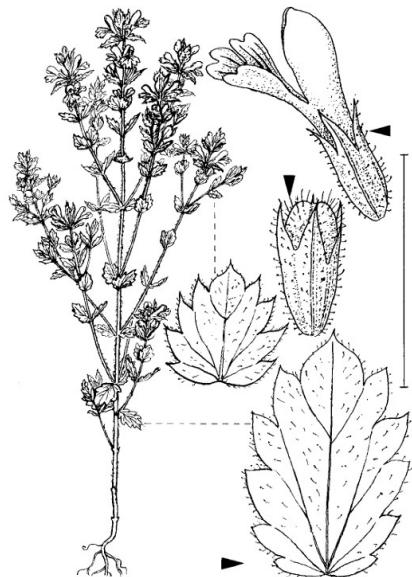


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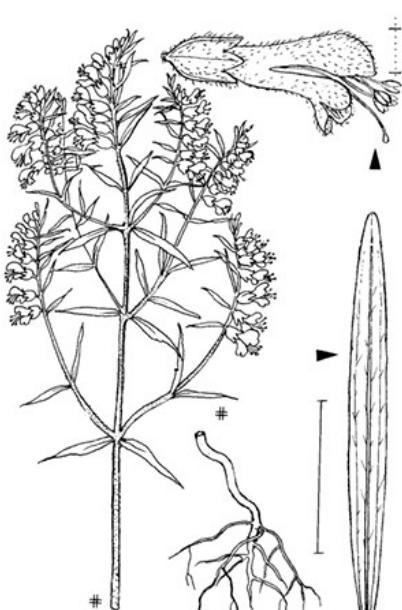
Berg-W. – *E. montanum* 0,10–0,80 ♂ 6–9  
(rosa. Stg grasgrün)

*Euphrasia officinalis* subsp. *rostkoviana* (Orobanchaceae)  
(Hayne) F. Towns. *Euphrasia rostkoviana*



Gewöhnlicher A. – *E. officinalis* 0,01–0,45  
○ 5–10 (weiß, bläulich od. gelb) ↗ S. 788

*Odontites luteus* (Orobanchaceae) (L.) Clairv.

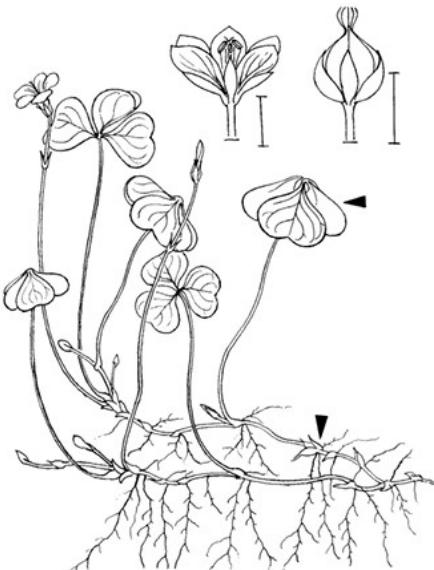


Gelber Z. – *O. luteus* 0,15–0,60 ○ 7–10  
(gelb)

## *Oxalis acetosella* (Oxalidaceae) L.

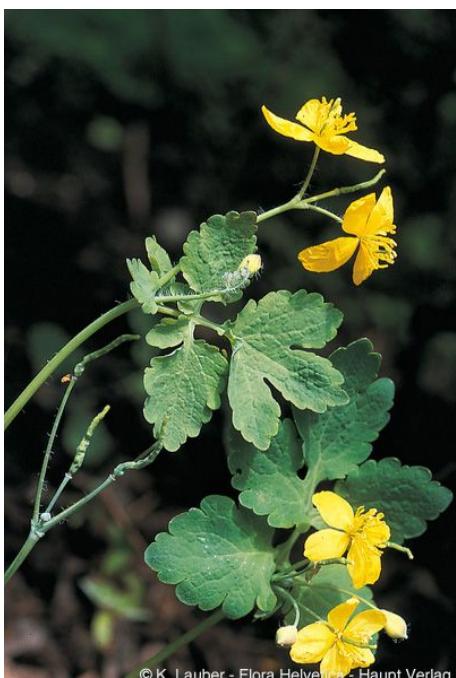


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**Wald-Sauerklee – *Oxalis acetosella***  
0,05–0,12 ♂ 4–5 (weiß, purpur geädert)

## *Chelidonium majus* (Papaveraceae) L.



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**Schöllkraut – *Chelidonium majus***  
0,30–0,70 ♂ 4–10 (gelb. Milchsaft orange)

*Pseudo-fumaria alba* (Papaveraceae) (Mill.) Lidén *Corydalis alba* (Mill.) Mansf.

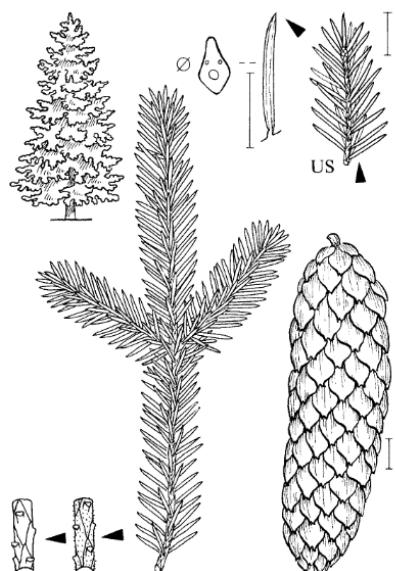


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**Blassgelber S.** – *P. alba* 0,10–0,40 ♂  
6–10 (weißlich, Spitze dunkler, gelblich. Bl  
beidseits blaugrün)

*Picea abies* (Pinaceae) (L.) H.Karst.

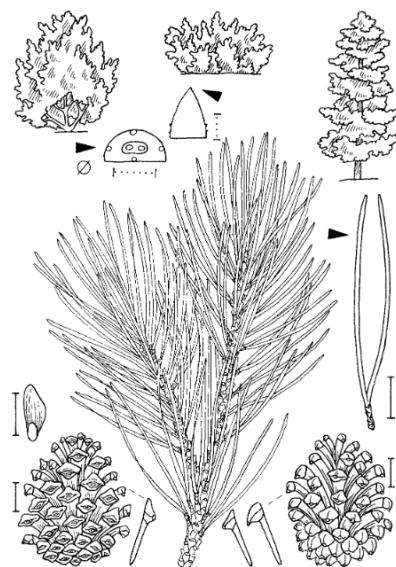


**Gewöhnliche F.** – *P. abies*  
Bis 50,00 (~60,00) ♂, 4–6 (Nadeln allseits  
dunkelgrün. Zapfen braun)

*Pinus sylvestris* (Pinaceae) L.



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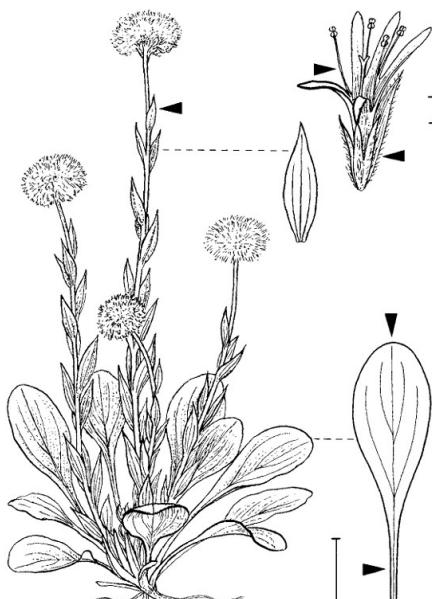


\*\*Gewöhnliche Kiefer – *Pinus sylvestris*  
Bis 30,00(–40,00) ♂ 5–6 (Zapfen matt grau-  
braun. Stamm oben hell rotbraun)

*Globularia bisnagarica* (Plantaginaceae) L. *Globularia punctata*



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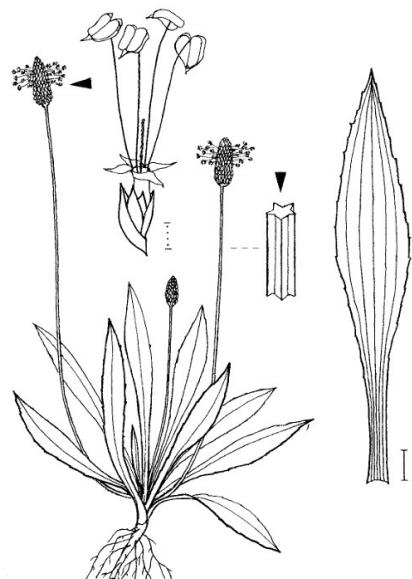


Gewöhnliche K. – *G. bisnagarica*  
0,05–0,30 ♀ 5–6 ▽ (blau-lila)

*Plantago lanceolata* (Plantaginaceae) L.



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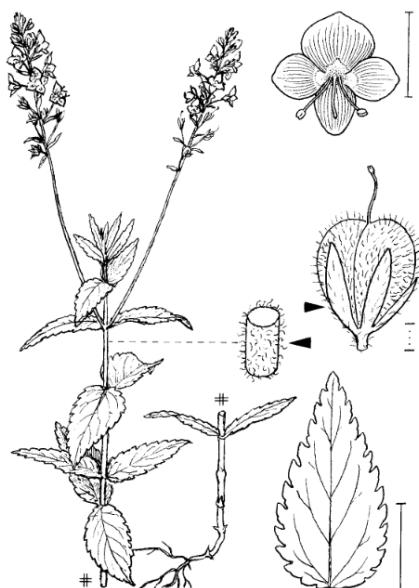


**Spitz-Wegerich** – *Plantago lanceolata*  
0,10–0,50 ♂ 5–9 (StaubBl blassgelb, Kr bräunlich)

*Veronica teucrium* (Plantaginaceae) L.

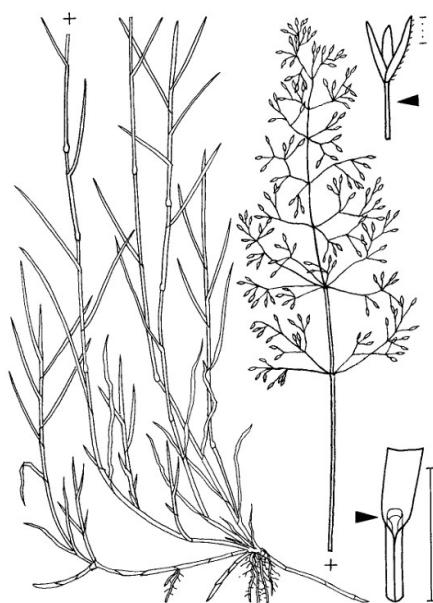


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**Großer E.** – *V. teucrium* 0,30–0,80 ♂ 6–7  
(azurblau, dunkler geadert)

*Agrostis capillaris* (Poaceae) L.



Rotes Straußgras – *Agrostis capillaris*  
0,20–0,80 ♂ 6–7 (variabel)

*Arrhenatherum elatius* (Poaceae) (L.) J. Presl & C. Presl



\*\*Glatthafer – *Arrhenatherum elatius*  
0,60–1,20 ♂ 6–7

*Brachypodium pinnatum (Poaceae)* (L.) P. Beauv.



\*Fieder-Zwenke – *Brachypodium pinnatum* 0,60–1,00 ⌚ 6–7

*Brachypodium sylvaticum (Poaceae)* (Huds.) P. Beauv.



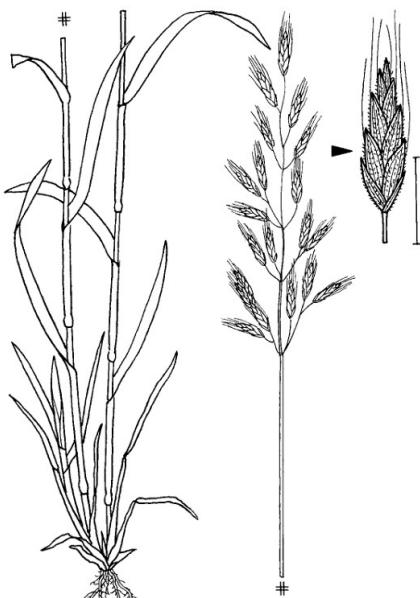
Wald-Z. – *B. sylvaticum* 0,60–1,20 ⌚ 7–8

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*Bromus hordeaceus* (Poaceae) L.



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\*\*Weiche T. – *B. hordeaceus* 0,05–0,80 ◎

*Bromus sterilis* (Poaceae) L.



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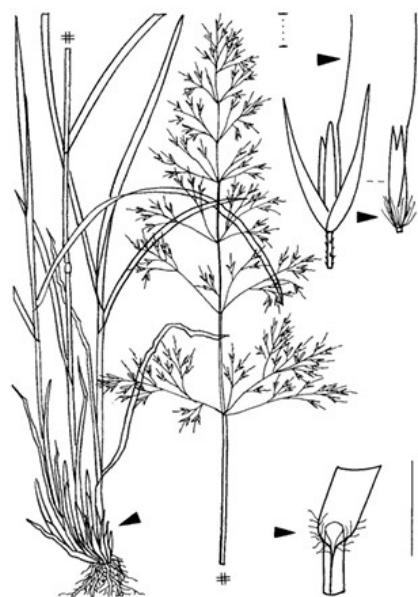


Taube T. – *B. sterilis* 0,30–0,60 ◎ ① 5–6

*Calamagrostis arundinacea* (Poaceae) (L.) Roth

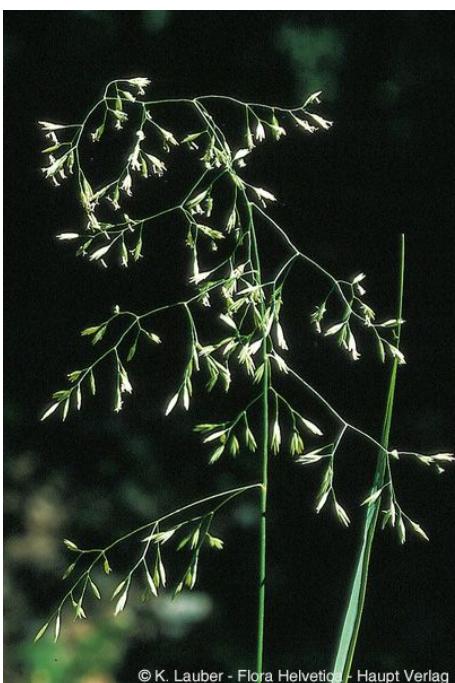


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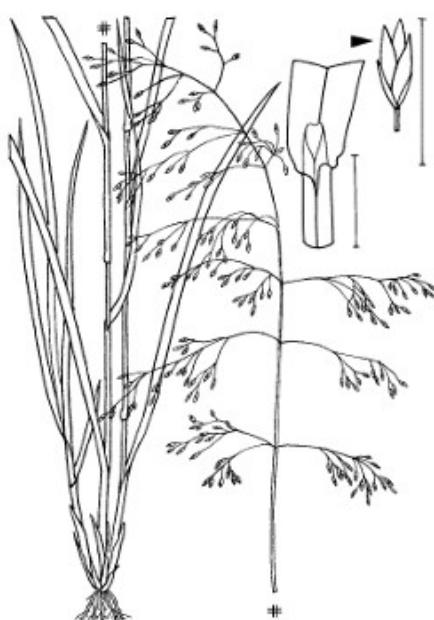


**Wald-R.** - *C. arundinacea* 0,60–1,20 ♂ 6–7

*Festuca altissima* (Poaceae) All.



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**Wald-Sch.** - *F. altissima* 0,60–1,20 ♂ 6–7

*Festuca arundinacea* (Poaceae) Schreb.



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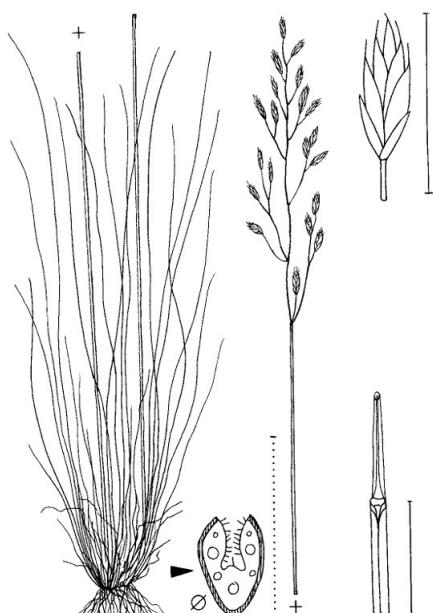


\*\*Rohr-Sch. – *F. arundinacea* 0,60–1,80 ♂  
6–7 (GrundBl Scheiden weißlich)

*Festuca ovina* (Poaceae) L. agg.



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\*\*Schaf-Sch. – *F. ovina* 0,20–0,70 ♂ 5–8

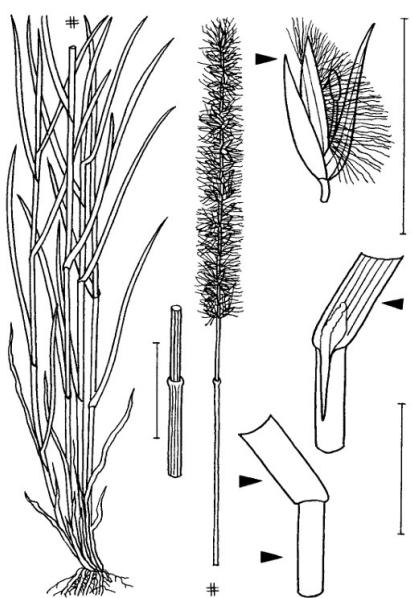
*Festuca pallens* (Poaceae) Host



*Melica ciliata* agg. (Poaceae) L.



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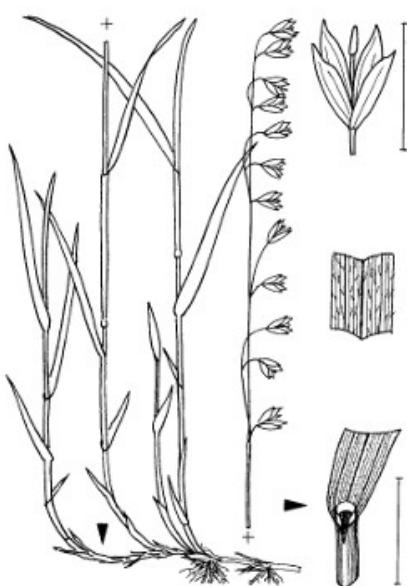


\*\*Wimper-P. – *M. ciliata* 0,20–0,70 ♂ 6  
(Bl graugrün)

*Melica nutans* (Poaceae) L.



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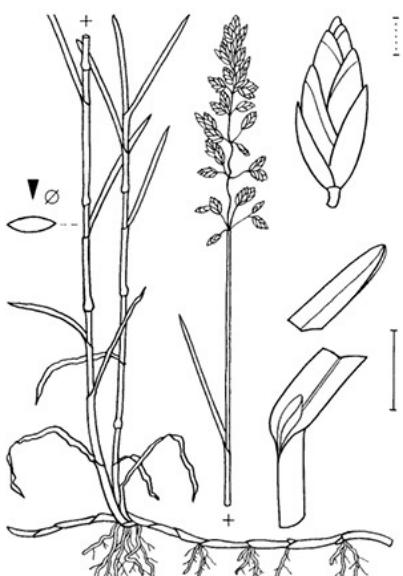


**Nickendes P.** – *M. nutans* 0,30–0,60 ♂ 5–6  
(Hsp braunrot)

*Poa compressa* (Poaceae) L.

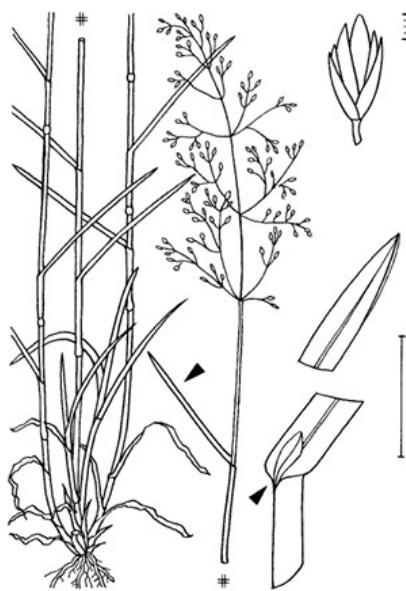


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**Platthalm-R.** – *P. compressa* 0,20–0,80  
♀ 6–7

*Poa nemoralis* (Poaceae) L.



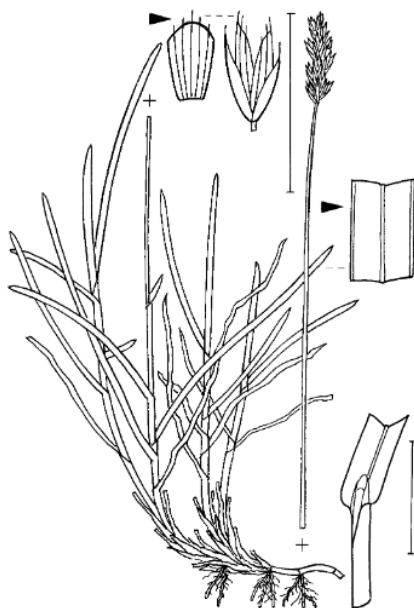
**Hain-Rispengras – *Poa nemoralis***  
0,30–0,80 ♂ 6–7

*Poa pratensis* (Poaceae) L.



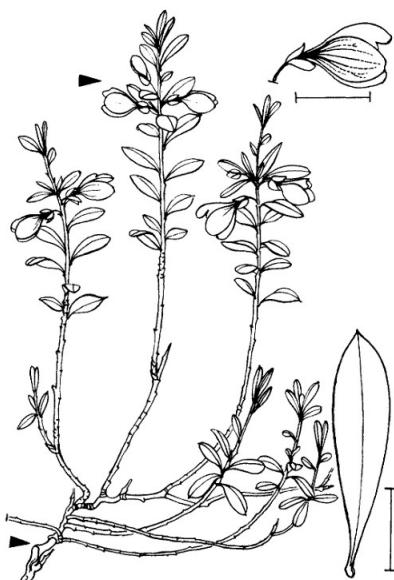
**\*Wiesen-R. – *P. pratensis* 0,20–0,90 ♂  
5–6 ✸ S. 783**

*Sesleria caerulea* (Poaceae) L. *Sesleria albicans*



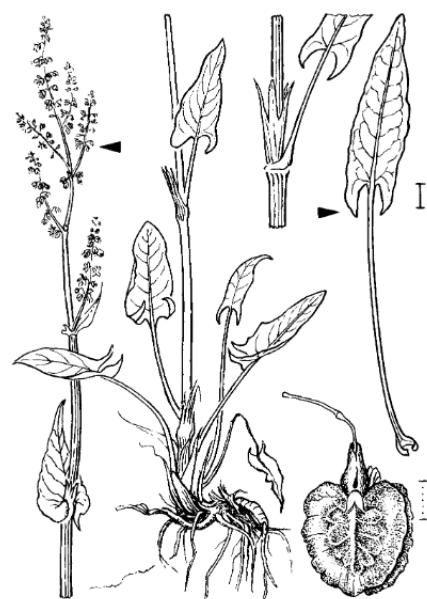
Kalk-B. – *S. coerulea* 0,10–0,45 ♂ 3–5

*Polygala chamaebuxus* (Polygalaceae) L.



Zwergbüchs – *Polygala chamaebuxus*  
0,10–0,25 ♂ 4–8 (gelb-weiß, selten rötlich  
überlaufen)

*Rumex acetosa* (Polygonaceae) L.



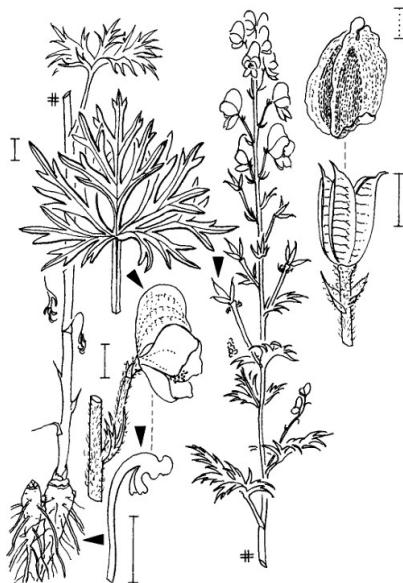
Wiesen-Sauerampfer – *Rumex acetosa*  
0,30–1,00 ♂ 5–7 (rötlichgrün)

*Rumex acetosella* (Polygonaceae) L.



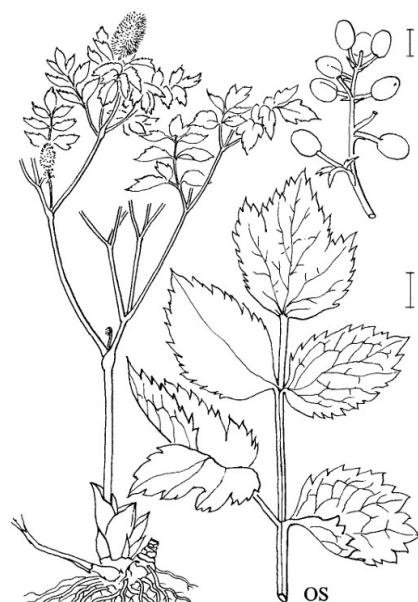
\*\*Kleiner S. – *R. acetosella* 0,10–0,30 ♂  
5–7 (grünlich. Formenreich)

*Aconitum napellus* (Ranunculaceae) L.



**Blauer E.** – *A. napellus* subsp. *lusitanicum*  
0,30–2,00 ♂ 6–8 ▽ (tiefblau bis  
dunkelviolett) ✸ S. 783

*Actaea spicata* (Ranunculaceae) L.

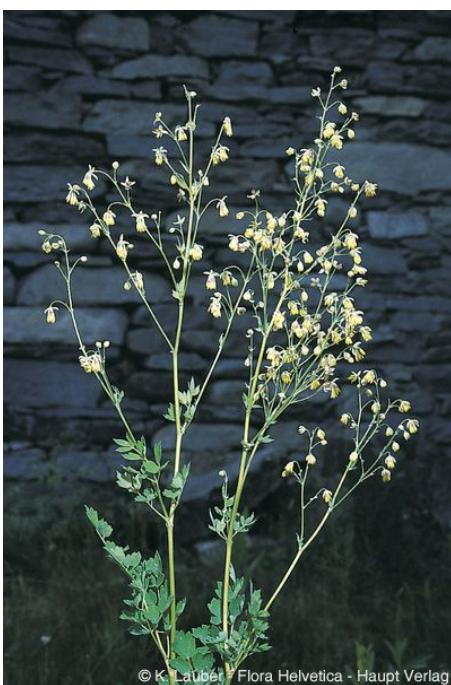


**Christophskraut** – *Actaea spicata*  
0,30–0,60 ♂ 5–6 (weiß. Fr schwarz)

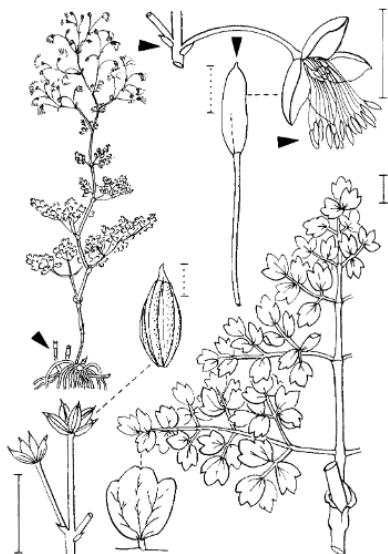
*Aquilegia vulgaris* (Ranunculaceae) L.



*Thalictrum minus* (Ranunculaceae) L.



Gewöhnliche Akelei – *Aquilegia vulgaris*  
0,40–0,80 ♂ 5–7 ▽ (blauviolett, selten rosa  
od. weiß)



\*\*Kleine W. – *Th. minus* 0,15–1,20 ♂ 5–8  
(gelblich)

## *Rhamnus cathartica* (Rhamnaceae) L.



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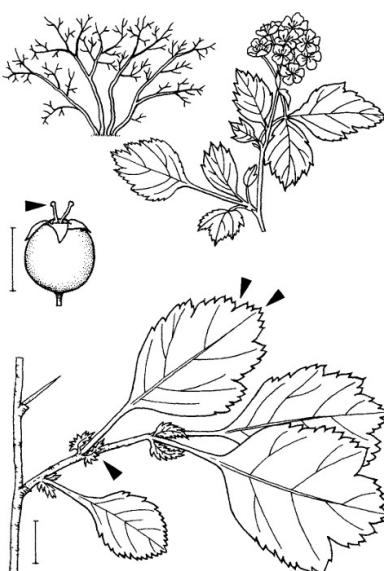


**Purgier-K. – *Rh. cathartica* 1,00–3,00  
H. 5–6 (gelblichgrün. Fr von grün sofort  
schwarz färbend)**

## *Crataegus laevigata* (Rosaceae) (Poir.) DC.

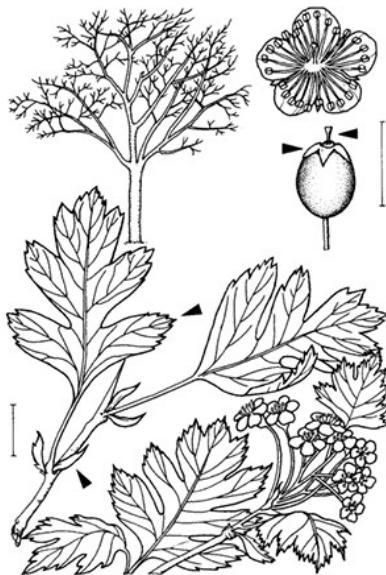


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**Zweigriffliger Weißdorn – *Crataegus laevigata* subsp. *laevigata* Bis 8,00 H. 5  
(weiß. Fr dunkelrot. Auch Baum)**

*Crataegus monogyna* (Rosaceae) Jacq.



**Eingrifflicher W.** – *C. monogyna* Bis 12,00  
H 5–6 (weiß od. rot. Fr dunkelrot. BlUS Seite  
bläulichgrün. Auch Strauch)

*Cotoneaster integerrimus* (Rosaceae) Medik.



**Gewöhnliche Zwergmispel** – *Cotoneaster integerrimus* 0,50–2,00 H 4–5 ▽ (weiß od.  
rosa. Fr rot, selten weiß)

*Fragaria vesca (Rosaceae)* L.



**Wald-E.** – *F. vesca* 0,05–0,20 ♂ 5–6  
(weiß. Spitzen der BlZähne hellrosa, grün gesäumt)

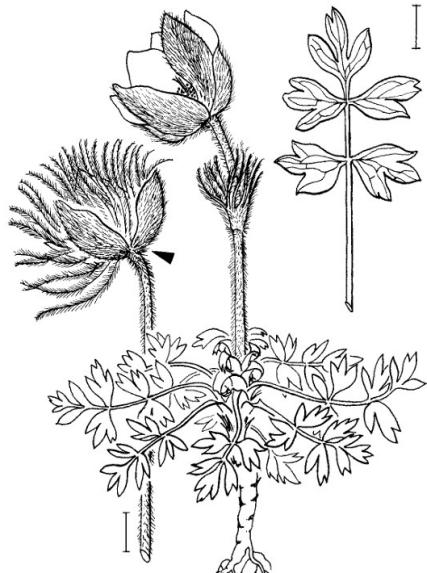
*Karpatiosorbus franconica (Rosaceae)* (Bornm.) Sennikov & Kurtto  
*Sorbus franconica*



**Potentilla verna (Rosaceae)** L. *Potentilla tabernaemontani*



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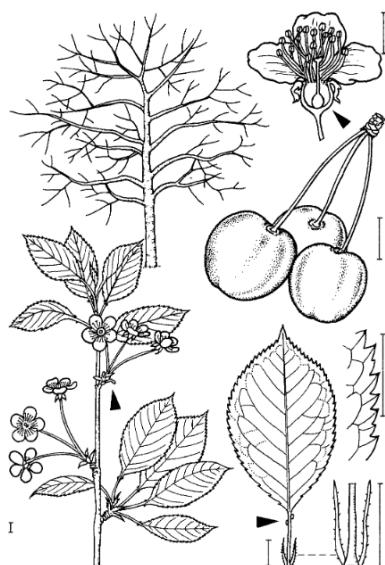


**Frühlings-K. – *P. vernalis*** 0,05–0,30 ♂  
4–6 ▽ (gelblichweiß, außen hellviolett  
überlaufen)

**Prunus avium (Rosaceae)** L.



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**\*\*Vogel-Kirsche, Süß-K. – *P. avium***  
Bis 25,00 ♂ 4–5 (weiß. Fr schwarzrot bis  
gelbrot)

*Rosa canina* (Rosaceae) L.



Hunds-R. – *R. canina* 1,00–3,50 ₋ 5–7  
(blassrosa od. weiß. Formenreich)

*Rosa micrantha* (Rosaceae) Borrer ex Sm.

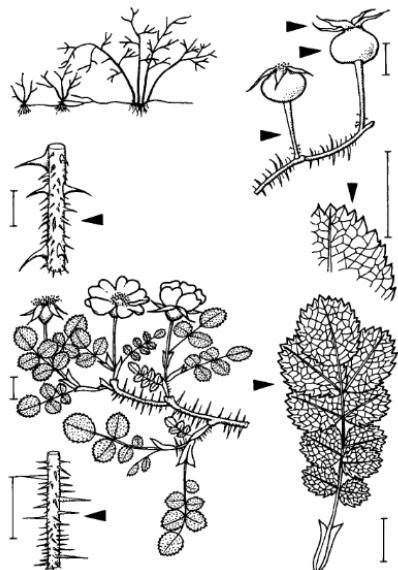


Kleinblütige R. – *R. micrantha*  
(1,00–)2,00–3,00 ₋ 6–7 (weiß od. blass-rosa. Bl schwach nach Apfel duftend)

*Rosa spinosissima* (Rosaceae) L.



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**Pimpinell-R.** – *R. spinosissima* 0,20–1,20  
H 5–6 (weiß, gelblich, selten hellrosa. Fr schwarzbraun)

*Rubus idaeus* (Rosaceae) L.

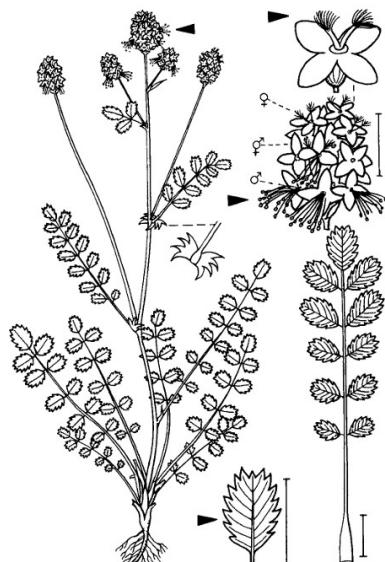


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**Himbeere** – *R. idaeus* 0,60–2,00 H 5–6  
(weiß. Fr rot. BlÜSeite weißfilzig. Stacheln violett)

*Sanguisorba minor* (Rosaceae) scop.



\*\*Kleiner Wiesenknopf – *Sanguisorba minor* 0,15–0,50(–0,80) ↗ 5–8 (erst grünlich, dann rötlich)

*Sorbus aria* (Rosaceae) aggr. *Aria edulis*

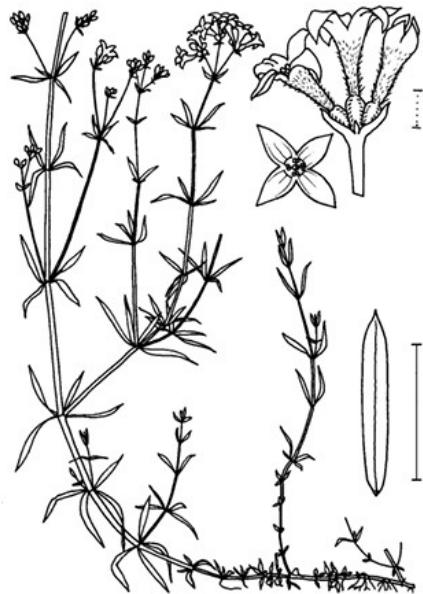


\*Gewöhnliche Mehlbeere – *Sorbus aria*  
Bis 10,00 ↗ 5–6 (weiß. Fr orange bis rot.  
BLUSeite weißfilzig)

*Asperula cynanchica* (Rubiaceae) L.



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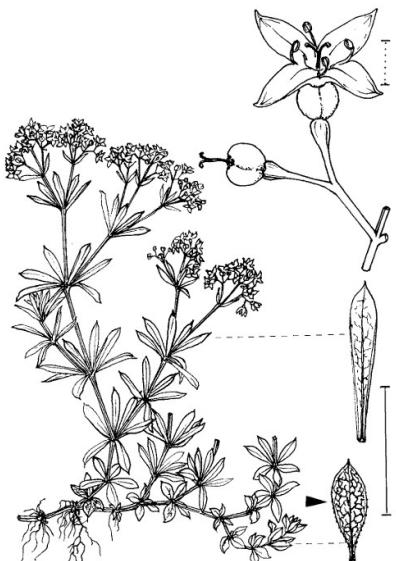


Hügel-M. – *A. cynanchica* 0,05–0,30 ♂  
6–9 (weiß, außen rosa überlaufen)

*Galium anisophyllum* (Rubiaceae) vill.



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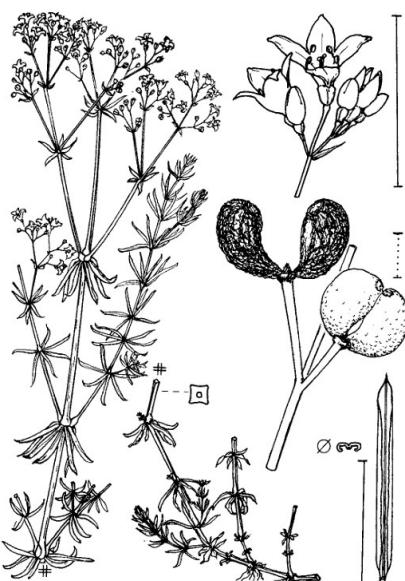


\*Ungleichblättriges L. – *G. anisophyllum*  
0,05–0,15 ♂ 7–9 (gelblichweiß bis weiß)  
↗ S. 787

## *Galium glaucum* (Rubiaceae) L.



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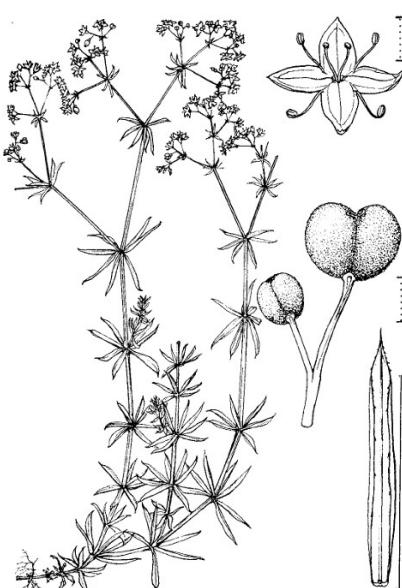


Blaugrünes Labkraut – *G. glaucum*  
0,30–0,60 ♂ 5–7 (weiß. Bl u. Stg blaugrün  
bis weißlichgrün)

## *Galium pumilum* (Rubiaceae) Murray



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Heide-L. – *G. pumilum* 0,10–0,40 ♂ 6–8  
(weiß)

*Galium saxatile (Rubiaceae)* L.



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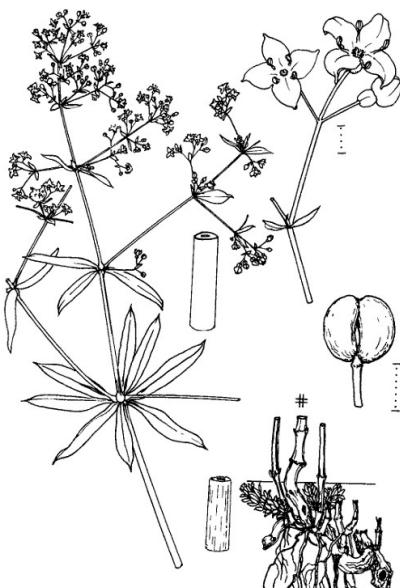


**Harzer L.** – *G. saxatile* 0,08–0,25 ♂ 6–8  
(weiß, in der Knospe manchmal leicht rosa  
getönt)

*Galium sylvaticum (Rubiaceae)* L.

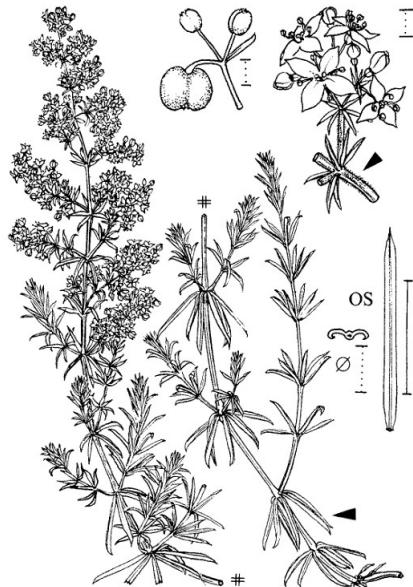


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**Wald-L.** – *G. sylvaticum* 0,30–1,00 ♂ 7–8  
(weiß. Ganze Pfl. blaugrün)

*Galium verum* (*Rubiaceae*) L. Subsp. *verum*



\*Echtes Labkraut – *Galium verum*  
0,20–0,70 ♂ 6–9 (zitronen- bis goldgelb)  
↗ S. 787

*Populus tremula* (*Salicaceae*) L.



Zitter-P. – *P. tremula* Bis 25,00 ♂ 3–4  
(♂ purpurgrau, ♀ rötlich, Narben purpur)

*Salix caprea* (Salicaceae) L.



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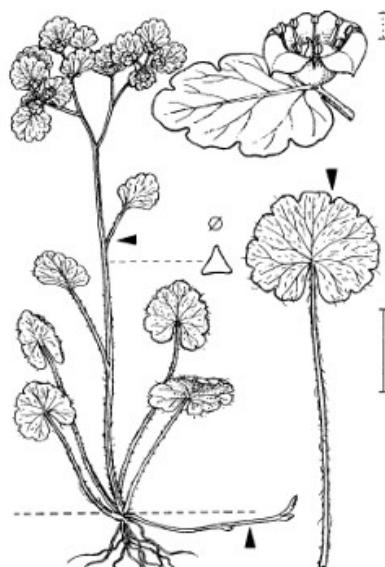


Sal-Weide - *Salix caprea* 3.00–10.00 ♂ 3–4 ♂ goldgelb, ♀ grün. Zweige kahl, nur amfangs weißhaarig

*Acer pseudoplatanus* (Sapindaceae) L.

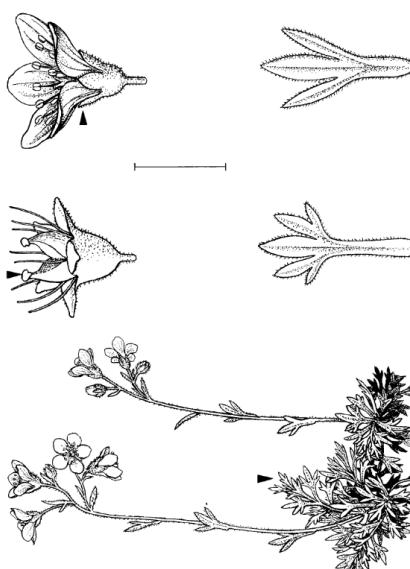


*Chrysosplenium alternifolium* (Saxifragaceae) L.



Wechselblättriges Milzkraut –  
*Chrysosplenium alternifolium* 0,15–0,20 ♀  
4–6 (gelb. HochBl gelbgrün)

*Saxifraga rosacea* (Saxifragaceae) Moench

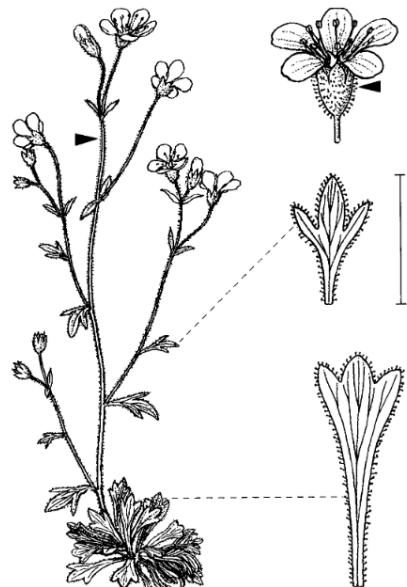


\*\*Rasen-St. – *S. rosacea* 0,05–0,25 ♂, 5–7 ▽ (weiß. Bl. weich. Dargestellt ist subsp.  
rosacea.)

*Saxifraga tridactylites* (Saxifragaceae) L.



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Finger-Steinbrech – *Saxifraga tridactylites*  
0,02–0,18 ♂ ⊖ 4–6 (weiß)

*Verbascum lychnitis* (Scrophulariaceae) L.

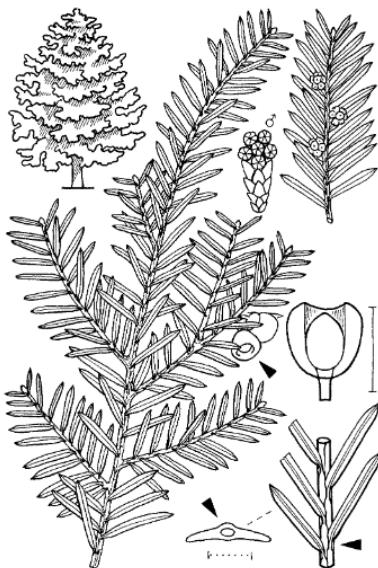


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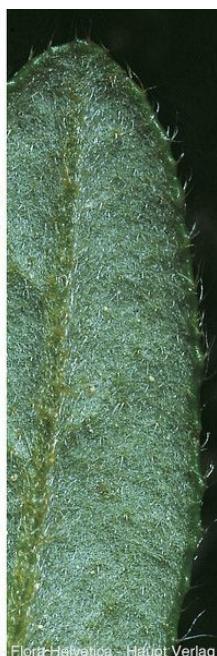
Mehlige Königskerze – *Verbascum lychnitis* 0,60–1,20 ♂ ⊖ 6–8 (hellgelb od.  
weiß, Staubfäden weißwollig)

*Taxus baccata* (Taxaceae) L.



Gewöhnliche Eibe – *Taxus baccata*  
Bis 15,00(-18,00) h 3-5 ▽ (Nadeln oseits  
dunkelgrün, useits heller. Samenmantel rot)

*Helianthemum nummularium* ssp. *obscurum* (Thymelaeaceae)  
(Celak.) Holub

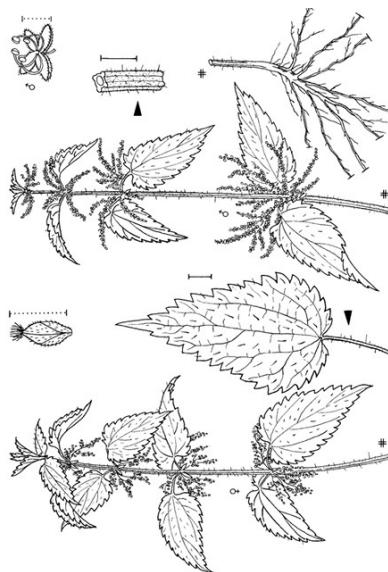


\*\*Gewöhnliches Sonnenröschen –  
*Helianthemum nummularium* 0,10-0,20 h,  
5-10 (gelb od. gelblichweiß)

*Urtica dioica* (Urticaceae) L.



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\*\*Große Brennnessel – *Urtica dioica* 0.30–1.50 2L 7–10 (grün). Pfl. meist 2häusig, selten thaluisig. Biennia u. Kurze drosselige Haare. Blätter flaumharr. Blattäste dunkelgrün, matt od. kaum glänzend) ▶ S.785

*Sambucus nigra* (Viburnaceae) L.



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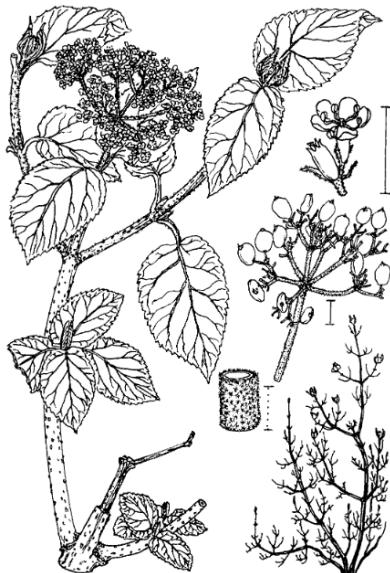


Schwarzer Holunder – *Sambucus nigra* 3.00–7.00 h 6–7 (weiß. Staubbeutel hellgelb). Fr. über rötlichbraun reif schwarz. Fr. Stiel oft rot überlaufen. SigMark weiß)

*Viburnum lantana* (Viburnaceae) L.



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**Wolliger Sch.** – *V. lantana* 1,00–3,00 ♂  
4–6 (schmutzigweiß. Fr erst rot, vollreif  
schwarz)

*Viola hirta* (Violaceae) L.



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**Behaartes V.** – *V. hirta* 0,05–0,25 ♀ 4–5  
(blau, Sporn rötlichviolett)

*Viola rupestris* (*Violaceae*) F.W.Schmidt



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**Sand-V. – *V. rupestris* 0,03–0,08 2 5–6  
(blauviolett, selten rötlich)**

# Non-Vascular Plants

## Bryophytes

### Hornworts

- Thalloid body like some liverworts
- Reproductive structures: elongated and horn-like



## Bryophytes

### Liverworts

- Leafy like mosses, but flatter, more ribbon-like appearance, less obvious differentiation between stems and leaves
- Thalloid: flat and spread out like a thin crust.



## Bryophytes

Mosses: Acrocarpous mosses

- Clearly differentiated stems and leaves
- Growth pattern: upright, tend to form dense clumps
- Reproductive placement: reproductive structures at the top of vertical stems
- Environmental preference: adaptive to varying moisture conditions, can survive drying



## Bryophytes

Mosses: Pleurocarpous mosses

- Growth pattern: Pleurocarpous mosses spread out, forming mats
- Reproductive placement: along the sides of branches
- Environmental preference: consistently wet habitats



## Lichens

Crustose

- Crust adhering tightly to the substrate
- Cannot be removed without damaging the substrate
- Most common morphotype in cliff plots!



## Lichens

Foliose

- Leaf-like lichens
- Attached at some points: some parts lift away from the substrate.
- Flat, leafy appearance, distinct upper and lower surface



## Lichens

Fruticose

- Bushy or hair-like
- Grow away from the substrate in all directions
- Often cylindrical or branched
- Do not have a distinct upper and lower surface.

