

## 1. Outward appearance

### 1.1 Habit

1. Solitary perennials
2. Leader perennials
3. Companion perennials
4. Ground-covering perennials

### 1.2 Perennials for colourful effects

5. Flowering calendar
6. Red-flower perennials
7. Orange-flower perennials
8. Yellow-flower perennials
9. Blue-flower perennials
10. Purple or violet-flower perennials
11. Pink and carmine, magenta and crimson perennials
12. White and grey perennial

### 1.3 Flowers, leaves, and roots

13. Fragrant perennials
14. Poisonous perennials
15. Perennials with autumn colours
16. Evergreen perennials
17. Colourful perennials
18. Rampant perennials

## 2. Characteristics and demands

### 2.1 Light needs

19. Sun-loving perennials
20. Perennials for semi-shade
21. Shade-loving perennials

### 2.2 Soil factors

22. Heath plants
23. Perennials for heavy soil
24. Perennials for damp areas and floods

## 3. Use

25. Indigenous wild perennials
26. Naturalised and foreign wild perennials
27. Farm garden
28. Extensive and simple, intensive roof greenery
29. Medicinal plants
30. Edible perennials
31. Butterfly perennials

# 1 - Solitary perennials

Free-standing, impressive plants are called solitaires. Solitaires can be trees, shrubs or perennials. Unlike plants that are present all year, perennials have to develop their conspicuous forms over and over again and only look truly impressive in mid-summer. The solitary perennials must be: impressively large, persistent in the vegetation period and long-lived. In practice, varieties that close early or are short-lived are not considered solitaires.

The size of the plant as a criterion for selection depends on the space available; the same plant that is a solitary in a tiny inner court might be lost in a broad landscape.

Splendid flowers, leaf texture (=surface quality of the foliage) and leaf colour as well as a clearly distinct, more or less densely closed habit are further important characteristics, but are less important than the variables of size and persistence. Cultivars that need support, grow like thickets, and are rampant are not considered solitaires.

Genus/species/variety	Size in cm	Special characteristics
<i>Achillea filipendulina</i> 'Parker'	100-120	rigid peduncles, syncarpy attractive far into winter
<i>Aconitum carmichaelii</i> 'Arendsii'	110-130	autumn flowers
<i>Aruncus dioicus</i>	120-150 (200)	flowers, autumn colours
<i>Aster novae-angliae</i> 'Andenken an Paul Gerber' u. a.	130-150 (180)	later flowers
<i>Aster novi-belgii</i> 'Dauerblau'	120-140	late, persistent flowers
<i>Cimicifuga racemosa cordifolia</i>	180-250	towering inflorescences
<i>Delphinium Elatum</i> -hybrids	150-180	flowers twice, needs cutting
<i>Eupatorium fistulosum</i> 'Atropurpureum'	180-200 (300)	giant but doesn't need support, flowers
<i>Helenium</i> -hybrid 'Kugelsonne'	120-150	many flowers
<i>Helianthus decapetalus</i> 'Capenoch Star'	120-150	late, persistent flowers
<i>Heliopsis scabra</i> 'Goldgefieder'	120-130	late, persistent flowers
<i>Inula magnifica</i>	150-200 (250)	giant but doesn't need support
<i>Ligularia przewalskii</i>	120-150 (180)	many flowers
<i>Macleaya cordata</i>	180-200 (300)	rampant, only stopped with rhizome barrier
<i>Rodgersia</i> species	110-150	long-lived, decorative leaves
<i>Rudbeckia nitida</i> 'Herbstsonne'	180-220	late flowers
<i>Verbascum olympicum</i>	180-220	short-lived, replant!
<b>Grasses</b>		
Bamboo in species and varieties	200-400	evergreen, put up rhizome barrier
<i>Calamagrostis acutiflora</i> 'Karl Foerster'	120-170	turns green early, spikes into autumn
<i>Carex pendula</i>	120-150	evergreen to nearly-evergreen
<i>Cortaderia selloana</i>	100-250 (500)	late flowers, evergreen
<i>Miscanthus giganteus</i>	250-350	dense clusters of leaves, hardly flowers
<i>Miscanthus sinensis</i> 'Gracillimus'	140-170	elegantly tilting, dense
<i>Miscanthus sinensis</i> 'Silberfeder'	150-220	many flowers
<i>Molinia arundinacea</i> 'Karl Foerster'	180-240	transparent, attractive spikes
<b>Ferns</b>		
<i>Dryopteris affinis</i>	100-160	need wind protection!
<i>Osmunda regalis</i>	50-150 (200)	moist to damp areas

## Leader perennials - 2

Leader perennials are the backbone of a perennial group. They set the tone for the group; their flower colour, their habit, and their size determine the character of the planting scheme. Companion and filler perennials adapt to them, complement them, and subordinate themselves to them. Unlike a solitary perennial, a leader perennial that directs the view of the plants does not occur alone. The same type or variety can be repeated in groups of various sizes and in irregular distances rhythmically.

Depending on the size of the plant group, one plant genus is selected as the determining element, or several varieties of leader perennials are combined with one another. Thus, one plant genus can occur as the leader perennial in the summer, with another taking over in autumn after the first has withered.

Like the solitary perennials, leader perennials have to be long-lived and clearly larger than their company. They must not wither and die too early and leave behind bare spots in the group.

Genus/species/variety	Size in cm	Special characteristics
Achillea filipendulina varieties	70-120	flowers long
Aconitum carmichaelii 'Arendsii'	110-130	late flowers
Aconitum napellus and others	80-120 (150)	flowers in July, then neutral
Anemone Japonica-hybrids	60-120	late flowers
Aruncus dioicus	120-150 (200)	attractive into winter
Aster novae-angliae varieties	100-150 (180)	many flowers
Aster novi-belgii	80-140	plentiful, long-lasting flowers
Astilbe Arendsii-hybrids	70-100	attractive into autumn
Astilbe chinensis taquetii 'Purpurlanze'	100-110	becomes broad
Chrysanthemum-hybrids (= Dendranthema) in varieties	70-80	very late flowers
Chrysanthemum serotinum (= Leucanthemella serotina)	130-150	very late flowers
Cimicifuga species and varieties	150-200 (250)	late flowers
Delphinium-hybrids	70-200	second flowers after cutting
Echinops bannaticus 'Blue Glow'	100-120	exotic
Euphorbia griffithii 'Fireglow'	50-80	attractive into autumn
Helenium-hybrids	70-150	overflowing with flowers
Helianthus decapetalus 'Capenoch Star'	120-150	numerous late flowers
Hemerocallis-hybrids	70-90	early shoots, autumn colours
Hosta-hybrid 'Royal Standard'	50-100	early shoots, autumn colours
Hosta-hybrid 'Sum and Substance'	50-80	broad clump, autumn colours
Kniphofia-hybrid 'Royal Standard'	50-100	winter green
Ligularia species and varieties	60-150	decorative flowers and leaves
Lythrum salicaria	80-150	endless propagation by seed!
Monarda-hybrids	80-150	flowers long
Paeonia Lactiflora-hybrids	80-100 (120)	plentiful flowers, autumn colours
Phlox paniculata varieties	70-140	overflowing with flowers
Rodgersia species	60-120	persistent, decorative leaves
Sedum telephium 'Herbstfreude'	50-70	for low groups, otherwise as company

*continued on next page*

## 2 - Leader perennials

continued

Genus/species/variety	Size in cm	Special characteristics
<b>Grasses</b>		
Calamagrostis acutiflora 'Karl Foerster'	120-170	turns green early, attractive into autumn
Carex pendula	80-120	evergreen to nearly-evergreen
Festuca mairei	50-100	attractive into autumn
Helictotrichon sempervirens	60-100 (150)	evergreen
Miscanthus sinensis 'Gracillimus'	140-170	compact
Molinia caerulea	50-120	choose only low partners
Molinia arundinacea 'Karl Foerster'	70-180 (240)	transparent, only low partners
Panicum virgatum 'Rehbraun'	60-120	autumn colours
<b>Ferns</b>		
Athyrium filix-femina	50-100	early shoots, autumn colours
Dryopteris affinis	100-160	winter green, need wind protection
Dryopteris filix-mas	50-120	early shoots
Polystichum setiferum	30-80	for low groups, otherwise as company

## 3 - Companion perennials

Companion perennials, as the name suggests, accompany leader perennials. They can be used with the same flowers, colour, habit, or texture (=surface quality of the leaves) or in contrast to the leader.

There are four types:

1. companion perennials that flower before the leaders,
2. companion perennials that flower with the leaders,
3. companion perennials that flower after the leaders,
4. neutral companion perennials that are "only" green.

The various types are defined by the flowering period and the appearance of the leader. Long-lived companion perennials are generally planted in the front or distributed over the whole area as a group for greater contrast so that the green stays into autumn. If companion perennials wither and die early, they are more often put in the middle or the background of the bed. There, they can wither and die behind their long-lived partners without being noticed and without causing gaps in the bed.

Genus/species/variety	Size in cm	Behaviour
Achillea filipendulina varieties	70-120	long into autumn
Achillea Millefolium-hybrids	30-70	inconspicuous from August on
Achillea ptarmica 'Boule de Neige'	50-70	long-lived, becoming broad
Aconitum species and varieties	80-100	long-lived, somewhat late flowers
Alchemilla mollis	30-50	long-lived
Anchusa azurea 'Dropmore'	80-100	inconspicuous or withering from July on
Anemone hupehensis 'Septembercharme'	50-70	long-lived, becoming broad

Genus/species/variety	Size in cm	Behaviour
Anemone Japonica-hybrids	60-100	long-lived, late flowers
Aquilegia-hybrids	50-60	usually withering in June
Artemisia ludoviciana 'Silver Queen'	70-80	long-lived, keep an eye on runners
Aruncus aethusifolius	25-30	long-lived, autumn colours
Aster amellus	40-60	long-lived
Aster divaricatus	50-60	long-lived, large groups
Aster Dumosus-hybrids	30-50	long-lived, covering large surfaces
Aster novi-belgii	80-120 (140)	long-lived, numerous flowers in autumn
Astilbe Arendsii-hybrids	50-100	long-lived, autumn colours
Astilbe chinensis taquetii 'Purpurlanze'	100-110	long-lived
Astrantia major	50-70	gradually broad
Bergenia cordifolia + hybrids	30-60	winter green
Brunnera macrophylla	30-50	very early shoots
Campanula persicifolia varieties	60-80	inconspicuous from August on
Centranthus ruber 'Coccineus'	50-70	long-lived, flowers long
Chrysanthemum-hybrids varieties	40-80	very late flowers
Chrysanthemum leucanthemum varieties	50-70	better in wild beds
Chrysanthemum maximum varieties	70-80	tranplant after 3-5 years
Coreopsis grandiflora varieties	30-80	long-lived
Delphinium Belladonna-hybrids	70-130	second flowers after cutting
Dicentra spectabilis + 'Alba'	60-90	wither from June on
Digitalis grandiflora	50-100	long-lived
Digitalis purpurea 'Gloxiniaeflora'	120-150	loose appearance with propagations by seed
Doronicum orientale 'Magnificum'	40-60	wither from June on
Echinacea purpurea	70-90	wither from September on
Echinops bannaticus 'Blue Glow'	100-120	better in wild beds
Erigeron Hybriden varieties	60-70	second flowers after cutting
Euphorbia griffithii 'Fireglow'	50-80	long-lived, autumn colours
Euphorbia polychroma	30-50	early flowering, autumn colours
Geranium pratense 'Johnson's Blue'	60-70	needs staking after flowering
Gypsophila paniculata 'Schneeflocke'	70-80	second flowers after cutting
Helenium-hybrids	80-150	long-lived, better as leader
Heliopsis scabra varieties	120-130	long-lived, better as leader
Hemerocallis-hybrids	40-100	very early shoots, autumn colours
Heuchera-hybrids	30-50	front of border only
Hosta species and varieties	30-100	long-lived, autumn colours
Iris Barbata-hybrids	40-70	winter green
Kniphofia-hybrids	50-100	long-lived, winter green
Lavandula angustifolia varieties	30-60	evergreen, subshrub
Ligularia species	60-150	better as leader
Lupinus Polyphyllus-hybrids	60-100	not attractive after flowering
Monarda-hybrids	80-120	long-lived
Nepeta faassenii 'Six Hills Giant'	60-90	needs a lot of space
Oenothera tetragona	50-60	not attractive after flowering
Paeonia Lactiflora-hybrids	80-100	early shoots, autumn colours
Paeonia officinalis 'Rubra Plena'	70-80	not attractive after flowering
Papaver orientale varieties	40-100	completely withers after flowering

*continued on next page*

### 3 - Companion perennials

continued

Genus/species/variety	Size in cm	Behaviour
Phlox paniculata varieties	70-90	long-lived, larger ones solitary
Polemonium caeruleum	30-80	early flowers
Primula Bullesiana-hybrids	30-50	short-lived, self-sowing
Rudbeckia fulgida 'Goldsturm'	70-90	long-lived, flowers long
Salvia nemorosa varieties	40-60	second flowers after cutting
Sedum spectabile 'Rosenteller'	30-40	long-lived, late flowers
Sedum telephium 'Herbstfreude'	50-70	attractive into winter
Solidago caesia	80-90	better in wild gardens
Symphytum azureum	50-60	not attractive after May
Trollius chinensis 'Golden Queen'	80-100	withers after flowering
Verbascum species	60-180 (220)	short-lived, self-sowing
Veronica longifolia	60-100	neutral after July
Veronica austriaca teucrium 'Königsblau'	30-40	just plant here and there, small groups
<b>Grasses</b>		
Carex morrowii 'Variegata'	30-40	long-lived, evergreen
Deschampsia cespitosa	30-50	long-lived, winter green
Festuca mairei	40-50 (80)	long-lived, sometimes leader
Helictotrichon sempervirens	40-60	long-lived, evergreen
Panicum virgatum 'Rehbraun'	60-80	long-lived, conspicuous autumn colours
Pennisetum alopecuroides 'Hameln'	30-40	long-lived, autumn colours into winter
<b>Ferns</b>		
Athyrium filix-femina	30-100	long-lived, sometimes leader
Dryopteris filix-mas	30-120	long-lived, sometimes leader
Phyllitis scolopendrium	20-40 (60)	long-lived, winter green
Polystichum setiferum varieties	30-80	long-lived

### 4 - Ground-covering perennials

For uniform greenery on large surfaces, use perennials that spread flatly and closely using rhizomes (subterranean runners) and/or stolons (layers above ground), forming large colonies. Sometimes, you can use perennials that grow quickly and densely with profuse seed production and prevent self-settling plants from invading with their competitiveness.

True cushion plants are not suited for covering large areas. They do not give up their compact, domed habits and therefore cannot completely overtake the areas to be settled. Cushion plants give aggressive, spontaneous vegetation the chance to settle and expand.

Large areas used to be covered with just one type of plant. Nowadays, beds are planted like mosaics. For large or small groups, ground-cover perennials of equal size and equal growth rates can be mixed to provide a lively bed of vegetation. In such a bed, spontaneous vegetation that finds its way in would not be immediately annoying as it would be if there were only one type of plant in the bed. Greatly varying sizes and growth rates will, however, create an imbalance between the partners; strong-growing perennials will dominate extremely flat ones and suppress them.

## Ground-covering perennials - 4

Genus/species/variety	Use in small spaces	Use in large spaces	Number per m <sup>2</sup>
Acaena buchananii	+		7-12
Acaena microphylla and varieties	+		7-12
Achillea tomentosa	+		7-12
Ajuga reptans varieties	+		9-16
Alchemilla mollis		+	4-5
Anaphalis triplinervis varieties	+		7-9
Antennaria dioica 'Rubra'	+		12-25
Arabis caucasica 'Schneehaube'	+		9-12
Arabis procurrans 'Glacier'	+		9-18
Artemisia ludoviciana 'Silver Queen'		+	4-5
Artemisia stelleriana	+		5-7
Asarum europaeum	+		9-16
Aster divaricatus		+	3-4
Aster dumosus varieties	+	+	5-9
Astilbe chinensis pumila	+	+	5-9
Astilbe chinensis taquetii 'Purpurlanze'		+	3-4
Astrantia major		+	4-7
Bergenia cordifolia and hybrids	+	+	5-7
Brunnera macrophylla		+	5-7
Buglossoides purpureo-caerulea		+	5-9
Centaurea montana		+	4-7
Cerastium tomentosum 'Silberteppich'	+		7-12
Ceratostigma plumbaginoides	+	+	9-16
Chrysogonum virginianum	+		3-5
Corydalis lutea	+		9-18
Dianthus deltoides varieties	+		7-12
Dicentra eximia	+	+	7-12
Dryas suendermannii	+	+	9-12
Epimedium species and varieties	+	+	9-16
Fragaria vesca	+		12-25
Galium odoratum	+	+	9-16
Geranium cantabrigiense varieties	+	+	7-16
Geranium endressii		+	5-9
Geranium himalayense varieties		+	3-6
Geranium macrorrhizum varieties		+	4-9
Geranium renardii	+		5-12
Geranium sanguineum		+	5-12
Geum coccineum and hybrids	+	+	9-16
Gypsophila repens 'Rosea'	+		7-9
Helianthemum-hybrids	+		5-9
Iberis sempervirens varieties	+		5-7
Lamium maculatum varieties	+	+	7-9
Lamium galeobdolon 'Florentinum'		+	5-7
Lysimachia nummularia	+		12-18
Matricaria caucasica	+		12-16
Nepeta faassenii	+	+	7-12
Oenothera missouriensis	+		5-7

*continued on next page*

## 4 - Ground-covering perennials

continued

Genus/species/variety	Use in small spaces	Use in large spaces	Number per m <sup>2</sup>
Omphalodes verna and varieties	+	+	7-16
Phlomis russeliana		+	4-5
Phuopsis stylosa	+	+	7-12
Polygonum affine 'Darjeeling Red'		+	7-16
Potentilla aurea	+		9-16
Prunella grandiflora	+		9-16
Pulmonaria angustifolia 'Azurea'	+	+	7-16
Pulmonaria saccharata varieties	+		9-12
Sedum acre	+		12-25
Sedum album 'Coral Carpet'	+	+	9-18
Sedum floriferum 'Weihenstephaner Gold'	+	+	9-16
Sedum hybridum 'Immergrünchen'	+	+	9-16
Sedum spurium varieties	+	+	9-16
Stachys byzantina 'Silver Carpet'		+	7-12
Symphytum grandiflorum		+	5-9
Tellima grandiflora		+	5-7
Thymus species	+		12-25
Tiarella cordifolia	+	+	9-16
Veronica spicata incana	+		9-18
Vinca major		+	5-7
Vinca minor varieties	+	+	7-12
Waldsteinia geoides	+	+	7-12
Waldsteinia ternata	+	+	9-16

## 5 - Flowering calendar

The flowering period is not a set time. Rather, it depends on the weather and the temperature, especially in the transitional seasons of early spring and autumn. In spring, the standard flower period can be up to four weeks earlier or later.

Flowering time	Genus/species/variety	Flower colour
<b>til March</b> XII-II/III	Helleborus niger	milky white with green
<b>from March</b> III-IV	Anemone nemorosa	white, light pink on the outside
III-IV	Epimedium perralderianum 'Frohnleiten'	yellow
III-IV	Pulsatilla vulgaris	violet to violet blue
III-IV	Pulsatilla vulgaris 'Röde Klokke'	velvety dark red
III-IV/IX	Caltha palustris	golden yellow

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

Flowering time	Genus/species/variety	Flower colour
III-V	Alyssum montanum 'Berggold'	bright yellow
III-V	Omphalodes verna	sky blue
III-V	Omphalodes verna 'Alba'	white
III-V	Primula elatior	light yellow
III-V	Pulmonaria angustifolia 'Azurea'	gentian blue
III-V	Pulmonaria rubra	coral red
III-V	Symphytum grandiflorum	cream yellow
<b>from April</b>		
IV-V	Ajuga reptans	purple-blue
IV-V	Ajuga reptans 'Atropurpurea'	violet
IV-V	Alyssum saxatile 'Compactum'	yellow
IV-V	Arabis arendsii 'Compinkie'	light to dark pink
IV-V	Arabis caucasica 'Schneehaube'	white
IV-V	Arabis procurrens 'Glacier'	white
IV-V	Aubrieta-hybrid 'Dr. Mules' u.a.	velvety dark violet
IV-V	Aubrieta-hybrid 'Neuling'	lavender blue
IV-V	Aubrieta-hybrid 'Royal Blue'	dark blue
IV-V	Aubrieta-hybrid 'Royal Red'	magenta-red
IV-V	Bergenia cordifolia	carmine
IV-V	Bergenia cordifolia 'Rotblum'	carmine
IV-V	Bergenia-hybrid 'Silberlicht'	white with carmine
IV-V	Brunnera macrophylla	pure blue
IV-V	Buglossoides purpureocaerulea	gentian blue
IV-V	Epimedium rubrum 'Coccineum'	carmine with white
IV-V	Epimedium versicolor 'Sulphureum'	sulphur yellow
IV-V	Epimedium youngianum 'Niveum'	pale white
IV-V	Euphorbia myrsinites	yellow-green
IV-V	Fragaria vesca	white
IV-V	Galium odoratum	white
IV-V	Iris Barbata Nana-hybrid 'Coerulea'	sky blue
IV-V	Lamium maculatum 'Chequers'	carmine pink
IV-V	Lamium maculatum 'Silbergroschen'	crimson-pink
IV-V	Phlox subulata 'G. F. Wilson'	light purple-blue
IV-V	Phlox subulata 'Temiskaming'	crimson red
IV-V	Phlox subulata 'White Delight'	pure white
IV-V	Pulmonaria rubra 'Dora Bielefeld'	bright pink
IV-V	Pulmonaria saccharata 'Sissinghurst White'	pure white
IV-V	Vinca major	blue
IV-V	Waldsteinia geoides	yellow
IV-V	Waldsteinia ternata	yellow
IV-VI	Anemone sylvestris	white
IV-VI	Euphorbia polychroma	yellow bracts
IV-VI	Polemonium caeruleum	blue

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

continued on next page

## 5 - Flowering calendar

continued

Flowering time	Genus/species/variety	Flower colour
IV-VI	<i>Symphytum azureum</i>	sky blue
IV-VI	<i>Vinca minor</i>	blue
IV-VII/IX	<i>Chrysogonum virginianum</i>	light to golden yellow
<b>from Mai</b>		
V	<i>Chrysanthemum leucanthemum</i> 'Maikönigin'	milky white
V	<i>Convallaria majalis</i>	milky white
V	<i>Iris Barbata</i> Nana-hybrid 'Cyanea'	light to dark violet
V	<i>Paeonia officinalis</i> 'Rubra Plena'	blood-red
V-VI	<i>Antennaria dioica</i> 'Rubra'	pink-red
V-VI	<i>Aquilegia</i> -hybrid 'Blaue Töne'	intense blue
V-VI	<i>Aruncus aethusifolius</i>	milky white
V-VI	<i>Aster alpinus</i> 'Dunkle Schöne'	intense violet
V-VI	<i>Campanula glomerata</i> 'Alba'	pure white
V-VI	<i>Cerastium tomentosum</i> 'Silberteppich'	pale white
V-VI	<i>Dicentra spectabilis</i>	pink to carmine
V-VI	<i>Dicentra spectabilis</i> 'Alba'	pure white
V-VI	<i>Dryas suendermannii</i>	cream white to light yellow
V-VI	<i>Euphorbia griffithii</i> 'Fireglow'	orange to brick-red
V-VI	<i>Geranium himalayense</i> 'Gravetye'	bright blue
V-VI	<i>Geranium pratense</i> 'Johnsons Blue'	purple-blue
V-VI	<i>Geranium macrorrhizum</i> 'Spessart'	white with light pint
V-VI	<i>Geranium sanguineum</i>	carmine to carmine-red
V-VI	<i>Geranium magnificum</i>	purpurviolett
V-VI	<i>Geum coccineum</i> 'Borisii'	orange-red
V-VI	<i>Heuchera</i> -hybrid 'Leuchtkäfer'	dark scarlet
V-VI	<i>Heuchera</i> -hybrid 'Red Spangles'	bright red
V-VI	<i>Iris pseudacorus</i>	yellow
V-VI	<i>Iris Barbata</i> Elatior-hybrid 'Goldfackel'	yellow to orange-yellow
V-VI	<i>Lamiastrum galeobdolon</i> 'Florentinum'	light yellow
V-VI	<i>Lychnis viscaria</i> 'Plena'	carmine pink
V-VI	<i>Lysimachia nummularia</i>	yellow
V-VI	<i>Matricaria caucasica</i>	white
V-VI	<i>Paeonia Lactiflora</i> -hybrid 'Karl Rosenfield'	dark wine-red
V-VI	<i>Paeonia Lactiflora</i> -hybrid 'Sarah Bernhardt'	light silvery pink
V-VI	<i>Papaver orientale</i> 'Beauty of Livermere'	bright scarlet
V-VI	<i>Polygonatum multiflorum</i>	greenish white
V-VI	<i>Saxifraga urbium</i> 'Clarence Elliott'	pink
V-VI	<i>Stipa pulcherrima</i>	silvery
V-VI	<i>Tellima grandiflora</i>	greenish pink
V-VI	<i>Thymus doerfleri</i> 'Bressingham Seedling'	pink
V-VI	<i>Tiarella cordifolia</i>	pale white with pink
V-VI	<i>Veronica austriaca</i> <i>teucrium</i> 'Königsblau'	bright blue

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

Flowering time	Genus/species/variety	Flower colour
V-VII	<i>Centaurea montana</i>	blue
V-VII	<i>Geranium macrorrhizum</i> 'Ingwersen'	light to pale pink
V-VII	<i>Geranium macrorrhizum</i> 'Spessart'	whitish pink
V-VII	<i>Geum coccineum</i> 'Borrisii'	bright orange
V-VII	<i>Gypsophila repens</i> 'Rosea'	pink
V-VII	<i>Potentilla aurea</i>	yellow
V-VIII	<i>Gypsophila-Repens-hybrid</i> 'Rosenschleier'	pink
V/VIII	<i>Iris Barbata</i> Elatior-hybrid 'Lovely Again'	lavender
V-IX	<i>Corydalis lutea</i>	light yellow to yellow
V-IX	<i>Helianthemum-hybrid</i> 'Bronzeteppich'	brown orange
V-IX	<i>Helianthemum-hybrid</i> 'Cerise Queen'	carmine
V-IX	<i>Helianthemum-hybrid</i> 'Lawrensens Pink'	intense pink
V-IX	<i>Helianthemum-hybrid</i> 'Rubin'	ruby red
V-IX	<i>Helianthemum-hybrid</i> 'Snow Queen'	white
V-IX	<i>Helianthemum-hybrid</i> 'Sterntaler'	golden yellow
V-IX	<i>Nepeta faassenii</i> and varieties	purple
<b>from Juni</b>		
VI	<i>Aquilegia alpina</i>	pure blue
VI	<i>Dianthus deltoides</i> 'Alba'	white with pink mottling
VI	<i>Hemerocallis-hybrid</i> 'Corky'	golden yellow
VI	<i>Iris sibirica</i> 'Phosphorflamme'	various hues of blue
VI	<i>Paeonia Lactiflora-hybrid</i> 'Bunker Hill'	bright carmine
VI	<i>Papaver orientale</i> 'Königin Alexandra'	salmon pink
VI	<i>Physalis alkekengi franchetii</i>	greenish cream-white
VI-VII	<i>Achillea tomentosa</i> 'Aurea'	golden yellow
VI-VII	<i>Achillea Millefolium-hybrid</i> 'Kirschkönigin'	carmine
VI-VII	<i>Aconitum napellus</i>	dark blue
VI-VII	<i>Aconitum cammarum</i> 'Bicolor'	blue with white
VI-VII	<i>Anaphalis triplinervis</i> 'Sommerschnee'	milky white
VI-VII	<i>Anchusa azurea</i> 'Dropmore'	bright blue
VI-VII	<i>Artemisia ludoviciana</i> 'Silver Queen'	grey
VI-VII	<i>Aruncus dioicus</i>	cream-white
VI-VII	<i>Astrantia major</i>	silvery white with pink
VI-VII	<i>Campanula carpatica</i> 'Blaue Clips'	violet blue
VI-VII	<i>Campanula carpatica</i> 'Weiße Clips'	pure white
VI-VII	<i>Campanula persicifolia</i> 'Grandiflora Alba'	pure white
VI-VII	<i>Campanula persicifolia</i> 'Grandiflora Coerulea'	porcelian blue
VI-VII	<i>Chrysanthemum maximum</i> varieties	milky white
VI-VII	<i>Delphinium grandiflorum</i> 'Blauer Zwerg'	bright sky blue
VI-VII	<i>Dianthus deltoides</i> 'Brilliant'	bright ruby red
VI-VII	<i>Dianthus Plumarius-hybrid</i> 'Haytor'	white

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

*continued on next page*

## 5 - Flowering calender

continued

Flowering time	Genus/species/variety	Flower colour
VI-VII	Dianthus Plumarius-hybrid 'Maggie'	carmine pink with red
VI-VII	Dicentra eximia	crimson-pink
VI-VII	Digitalis purpurea 'Gloxiniaeflora'	pink, carmine, crimson
VI-VII	Geranium clarkei 'Kashmir White'	white with pink veins
VI-VII	Geranium renardii	whitish pink
VI-VII	Geranium catabrigiense 'Biokovo'	white with pink shimmer
VI-VII	Geranium catabrigiense 'Cambridge'	dark pink
VI-VII	Geum-hybrid 'Goldball'	yellow
VI-VII	Hemerocallis-hybrid 'Pink Damask'	pink with salmon-orange
VI-VII	Hemerocallis-hybrid 'Stella de Oro'	golden yellow to orange-yellow
VI-VII	Hosta crispula	light purple
VI-VII	Hypericum polyphyllum	golden yellow
VI-VII	Iberis sempervirens varieties	bright white
VI-VII	Lathyrus latifolius	carmine
VI-VII	Lupinus Polyphyllus-hybrid 'Kastellan'	blue with white
VI-VII	Lupinus Polyphyllus-hybrid 'Mein Schloss'	tile-red with red
VI-VII	Lupinus Polyphyllus-hybrid 'Schlossfrau'	pink with white
VI-VII	Rodgersia aesculifolia	cream-white
VI-VII	Rodgersia pinnata	cream-white
VI-VII	Sagina subulata	white
VI-VII	Sedum acre	bright yellow
VI-VII	Sedum album 'Coral Carpet'	white with pink shimmer
VI-VII	Sedum floriferum 'Weihenstephaner Gold'	golden yellow
VI-VII	Sedum hybridum 'Immergrünchen'	yellow
VI-VII	Trollius chinensis 'Golden Queen'	yellow-orange to orange
VI-VII	Veronica spicata incana	dark blue
VI-VII/VIII	Gypsophila paniculata 'Schneeflocke'	pale white
VI-VII/IX	Alchemilla mollis	yellow-green
VI-VII/IX	Delphinium Belladonna-hybrid 'Casa Blanca'	white
VI-VII/IX	Delphinium Belladonna-hybrid 'Piccolo'	gentian blue
VI-VII/IX	Delphinium Elatum-hybrid 'Waldenburg'	deep, dark blue
VI-VII/IX	Erigeron-hybrid 'Grandiflorus'	purple-blue
VI-VII/IX	Geum-hybrid 'Dolly North'	orange-red
VI-VIII	Astilbe Arendsii-hybrid 'Anita Pfeiffer'	salmon pink
VI-VIII	Campanula glomerata 'Dahurica'	deep violet blue
VI-VIII	Campanula poscharskyana 'Blauranke'	light violet blue
VI-VIII	Delphinium-Elatum-hybrid 'Blauwal'	ultramarine blue
VI-VIII	Digitalis grandiflora	sulphur yellow
VI-VIII	Linum perenne 'Saphir'	bright blue
VI-VIII	Lysimachia punctata	yellow
VI-VIII	Lythrum salicaria	carmine
VI-VIII	Nuphar lutea	yellow

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

Flowering time	Genus/species/variety	Flower colour
VI-VIII	<i>Nymphaea alba</i>	milky white
VI-VIII	<i>Nymphaea</i> -hybrid 'James Brydon'	carmine
VI-VIII	<i>Nymphaea</i> -hybrid 'Marliacea Chromatella'	light yellow
VI-VIII	<i>Nymphaea odorata</i> 'Rosennymphe'	intense pink, light pink
VI-VIII	<i>Oenothera tetragona</i>	bright golden yellow
VI-VIII	<i>Phlomis russeliana</i>	light yellow
VI-VIII	<i>Primula-Bullesiana</i> -hybrids	salmon pink, whitish pink, yellow, golden yellow-orange, apricot, orange, salmon
VI-VIII	<i>Prunella grandiflora</i>	crimson-violet
VI-VIII	<i>Ranunculus lingua</i>	yellow
VI-VIII	<i>Sagittaria sagittifolia</i>	white
VI-VIII	<i>Salvia nemorosa</i> 'Blauhügel'	blue
VI-VIII	<i>Salvia nemorosa</i> 'Ostfriesland'	deep violet
VI-VIII	<i>Stratiotes aloides</i>	white
VI-VIII	<i>Thymus serpyllum</i> 'Coccineus'	crimson red
VI-VIII	<i>Verbascum olympicum</i>	bright yellow
VI-VIII/IX	<i>Delphinium-Belladonna</i> -hybrid 'Atlantis'	dark blue-violet
VI-IX	<i>Achillea filipendulina</i> varieties	golden yellow
VI-IX	<i>Alisma plantago-aquatica</i>	white to whitish pink
VI-IX	<i>Calamintha nepeta nepeta</i>	whitish purple
VI-IX	<i>Centranthus ruber</i> 'Coccineus'	carmine pink
VI-IX	<i>Coreopsis grandiflora</i> 'Early Sunrise'	golden yellow
VI-IX	<i>Coreopsis verticillata</i> 'Grandiflora'	bright yellow
VI-IX	<i>Coreopsis Verticillata</i> -hybrid 'Moonbeam'	light yellow
VI-IX	<i>Coreopsis Verticillata</i> -hybrid 'Zagreb'	golden yellow
VI-IX	<i>Oenothera missouriensis</i>	light to citrus yellow
VI-IX	<i>Origanum vulgare</i> 'Compactum'	violet-pink
VI-IX	<i>Phuopsis stylosa</i>	pink
VI-IX	<i>Polygonum affine</i> 'Darjeeling Red'	pink to crimson-pink
VI-X	<i>Filipendula ulmaria</i>	cream-white
VI-X (XI)	<i>Geranium endressii</i>	pink
<b>from Juli</b>		
VII	<i>Artemisia schmidtiana</i> 'Nana'	grey-white
VII	<i>Astilbe Arendsii</i> -hybrid 'Fanal'	ruby red
VII	<i>Hosta sieboldiana</i> 'Elegans'	whitish purple
VII-VIII	<i>Artemisia stelleriana</i>	yellowish grey
VII-VIII	<i>Aster amellus</i> 'Rudolf Goethe'	lavender blue
VII-VIII	<i>Aster amellus</i> 'Sternkugel' u.a.	light violet
VII-VIII	<i>Astilbe chinensis taquetii</i> 'Purpurlanze'	crimson red
VII-VIII	<i>Astilbe Arendsii</i> -hybrid 'Brautschleier'	white to cream-white
VII-VIII	<i>Astilbe Arendsii</i> -hybrid 'Rotlicht'	bright ruby red
VII-VIII	<i>Helenium</i> -hybrid 'Moerheim Beauty'	mahogany-red

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

*continued on next page*

## 5 - Flowering calendar

continued

Flowering time	Genus/species/variety	Flower colour
VII-VIII	Helenium-hybrid 'Waltraud'	copper-red with yellow
VII-VIII	Hemerocallis-hybrid 'Sammy Russel'	tile-red
VII-VIII	Hosta fortunei 'Aureomarginata'	light violet
VII-VIII	Hosta-hybrid 'Royal Standard'	milky white
VII-VIII	Inula ensifolia	yellow
VII-VIII	Inula magnifica	golden yellow
VII-VIII	Lavandula angustifolia 'Dwarf Blue'	deep blue
VII-VIII	Lavandula angustifolia varieties	purple to violet
VII-VIII	Macleaya cordata	cream-white
VII-VIII	Phlox paniculata 'Starfire'	bright tile-red
VII-VIII	Sedum spurium 'Album Superbum'	white
VII-VIII	Sedum spurium 'Fuldaglut'	carmine
VII-VIII	Veronica longifolia	light blue
VII-IX	Achillea ptarmica 'Boule de Neige'	white
VII-IX	Butomus umbellatus	pink
VII-IX	Delphinium Elatum-hybrid 'Finsteraarhorn'	violet blue with black
VII-IX	Echinacea purpurea	carmine
VII-IX	Echinops bannaticus 'Blue Glow'	intense steel blue
VII-IX	Eryngium planum	steel blue
VII-IX	Heliopsis scabra 'Goldgefieder'	golden yellow
VII-IX	Heliopsis scabra 'Spitzentänzerin'	orange-yellow
VII-IX	Kniphofia-hybrid 'Royal Standard'	buds red, flowers yellow
VII-IX	Kniphofia-hybrids - mixed colours	yellow to orange-yellow, orange-yellow to orange, orange-red to rot
VII-IX	Monarda-hybrid 'Cambridge Scarlet'	scarlet
VII-IX	Monarda-hybrid 'Croftway Pink'	salmon pink
VII-IX	Monarda-hybrid 'Prärienacht'	deep crimson red
VII-IX	Origanum-Laevigatum-hybrid 'Herrenhausen'	red-violet
VII-IX	Rudbeckia fulgida 'Goldsturm'	golden yellow with black
<b>from August</b>		
VIII	Astilbe Arendsii-hybrid 'Glut'	dark red
VIII	Hosta lancifolia	crimson-violet
VIII	Hosta ventricosa	crimson-violet
VIII	Hosta tardiflora-hybrid 'Halcyon'	lavender
VIII	Phlox paniculata 'Eventide'	light purple-blue
VIII	Phlox paniculata varieties	pink to carmine
VIII	Phlox paniculata 'Kirmesländler'	white with pink bud
VIII-IX	Anemone hupehensis 'Septembercharme'	light pink-carmine
VIII-IX	Anemone Japonica-hybrid 'Honorine Jobert'	pure white
VIII-IX	Aster amellus 'Lady Hindlip'	pink
VIII-IX	Aster divaricatus	pale white

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

Flowering time	Genus/species/variety	Flower colour
VIII-IX	<i>Aster novae-angliae</i> 'Alma Pötschke'	salmon pink to salmon-red
VIII-IX	<i>Astilbe chinensis</i> pumila	violet-pink
VIII-IX	<i>Astilbe Arendsii</i> -hybrid 'Cattleya'	carmine pink
VIII-IX	<i>Chrysanthemum</i> -hybrid 'Bronzeteppich'	orange to brown-red
VIII-IX	<i>Chrysanthemum</i> -hybrid 'Orchid Helen'	purple-pink
VIII-IX	<i>Cimicifuga racemosa cordifolia</i>	cream-white
VIII-IX	<i>Eupatorium fistulosum</i> 'Atropurpureum'	crimson-carmine
VIII-IX	<i>Helenium</i> -hybrid 'Baudirektor Linne'	red-brown to tile-red
VIII-IX	<i>Helenium</i> -hybrid 'Kugelsonne'	yellow
VIII-IX	<i>Helianthus decapetalus</i> 'Capenoch Star'	golden yellow
VIII-IX	<i>Hosta</i> -hybrid 'Sum and Substance'	purple to lavender blue
VIII-IX	<i>Ligularia</i> species and varieties	yellow to golden yellow
VIII-IX	<i>Phlox paniculata</i> 'Nymphenburg'	white
VIII-IX	<i>Phlox paniculata</i> 'Pax'	pure white
VIII-IX	<i>Rudbeckia nitida</i> 'Herbstsonne'	yellow
VIII-X	<i>Sedum spectabile</i> 'Rosenteller'	pale carmine pink
<b>from September</b>		
IX	<i>Aster novae-angliae</i> 'Andenken an Paul Gerber'	carmine
IX	<i>Aster novae-angliae</i> 'Septemberrubin'	ruby red
IX	<i>Chrysanthemum</i> -hybrid 'Citrus'	light yellow
IX	<i>Cimicifuga ramosa</i> 'Atropurpurea'	white with pink shimmer
IX-X	<i>Aconitum carmichaelii</i> 'Arendsii'	violet blue
IX-X	<i>Anemone Japonica</i> -hybrid 'Bressingham Glow'	dark ruby-pink
IX-X	<i>Anemone Japonica</i> -hybrid 'Prinz Heinrich'	crimson red
IX-X	<i>Aster amellus</i> 'Veilchenkönigin'	dark ruby-pink
IX-X	<i>Aster novae-angliae</i> 'Barr's Blue'	dark lavender blue
IX-X	<i>Aster novae-angliae</i> 'Purple Dome'	dark ruby-pink
IX-X	<i>Aster novae-angliae</i> 'Rudelsburg'	salmon pink
IX-X	<i>Aster novi-belgii</i> 'Blaue Nachhut'	light lavender blue
IX-X	<i>Aster novi-belgii</i> 'Dauerblau'	dark purple-blue
IX-X	<i>Aster novi-belgii</i> 'Karminkuppel'	carmine
IX-X	<i>Aster novi-belgii</i> 'Schöne von Dietlikon'	purple-blue
IX-X	<i>Aster Dumosus</i> -hybrid 'Herbstgruß vom Bresserhof'	pink-red
IX-X	<i>Aster Dumosus</i> -hybrid 'Kassel'	carmine
IX-X	<i>Aster Dumosus</i> -hybrid 'Professor Anton Kippenberg'	blue
IX-X	<i>Aster Dumosus</i> -hybrid 'Schneekissen'	white
IX-X	<i>Aster Dumosus</i> -hybrid 'Wachsenburg'	violet-pink
IX-X	<i>Chrysanthemum serotinum</i>	pale white
IX-X	<i>Chrysanthemum</i> -hybrid 'Edelweiß'	white
IX-X	<i>Chrysanthemum</i> -hybrid 'Fellbacher Wein'	wine red
IX-X	<i>Chrysanthemum</i> -hybrid 'Schwabenstolz'	dark bronze red
IX-X	<i>Chrysanthemum</i> -hybrid 'White Bouquet'	white with pink shimmer
IX-X	<i>Cortaderia selloana</i>	silvery white
IX-X	<i>Miscanthus sinensis</i> 'Silberfeder'	silvery
IX-X	<i>Sedum telephium</i> 'Herbstfreude'	carmine-crimson to carmine-brown
IX-X	<i>Solidago caesia</i>	golden yellow
IX-XI	<i>Ceratostigma plumbaginoides</i>	gentian blue

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

## 6 - Red-flower perennials

The colour red occurs in three forms among perennials: as a flower colour, as foliage colour-where it tends towards brownish-and finally as autumn colours (see table of foliage and autumn colours). This red can either be used in monochrome gardens-i.e. where only red is used aside from the normal green of the leaves-or as flower colour and leaf colour. Along with these artificial, artful design motifs, the use of red can be used in diverse colour combinations such as the "warm" colour sequence: red-orange-yellow or the "primary contrast", a three-colour spectrum with the three primary colours red-yellow-blue as well as in free variations with other colours, such as with white and purple.

Two basic distinctions in topiary are made with red: warm red such as brick-red, scarlet, velvety brown-red, etc. and cold red: carmine, crimson red.

Genus/species/variety	Flower colour	Flowering time
Aster novae-angliae 'Septemberrubin'	ruby red	IX
Astilbe Arendsii-hybrid 'Fanal'	ruby red	VII
Astilbe Arendsii-hybrid 'Glut'	dark red	VIII
Astilbe Arendsii-hybrid 'Rotlicht'	bright ruby red	VII-VIII
Chrysanthemum-hybrid 'Bronzeteppich'	brown-red to orange	VIII-IX
Chrysanthemum-hybrid 'Fellbacher Wein'	wine red	IX-X
Chrysanthemum-hybrid 'Schwabenstolz'	dark bronze red	IX-X
Dianthus deltoides 'Brillant'	bright ruby red	VI-VII
Euphorbia griffithii 'Fireglow'	orange-red (bracts)	V-VI
Geum coccineum 'Borisii'	orange-red	V-VI
Geum-hybrid 'Dolly North'	orange-red	VI-VII/IX
Helenium-hybrid 'Baudirektor Linne'	red-brown to tile-red	VIII-IX
Helenium-hybrid 'Moerheim Beauty'	mahogany-red	VII-VIII
Helenium-hybrid 'Waltraud'	copper-red with yellow	VII-VIII
Helianthemum-hybrids 'Bronzeteppich'	brown orange	V-IX
Hemerocallis-hybrid 'Sammy Russel'	tile-red	VII-VIII
Heuchera-hybrid 'Red Spangles'	bright red	V-VI
Heuchera-hybrid 'Leuchtkäfer'	dark scarlet	V-VI
Kniphofia-hybrid 'Royal Standard'	buds orange-scarlet, then yellow	VII-IX
Kniphofia-hybrids - Farbmischung	orange-red to red	VII-IX
Lupinus Polyphyllus-hybrid 'Mein Schloss'	tile-red with red	VI-VII
Monarda-hybrid 'Cambridge Scarlet'	scarlet	VII-IX
Paeonia Lactiflora-hybrid 'Karl Rosenfield'	dark wine-red	V-VI
Paeonia officinalis 'Rubra Plena'	blood-red	V
Papaver orientale 'Beauty of Livermere'	bright scarlet	V-VI
Phlox paniculata 'Starfire'	bright tile-red (signal red)	VII-VIII
Pulmonaria rubra	coral red	III-V
Pulsatilla vulgaris 'Röde Klokke'	velvety dark red	III-IV

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

## 7 - Orange-flower perennials

Orange is a mixed colour between warm red and yellow and can be used equally well with both. Partners that are full of contrasts would have blue-violet hues, colours that would have to be far more plentiful than orange in a bed in order to match the powerful glow of orange. Orange occurs among perennials both as a flower colour and as an autumn colour. The hues of apricot and salmon-orange are counted under the main colour orange.

## Orange-flower perennials - 7

Genus/species/variety	Flower colour	Flowering time
Chrysanthemum-hybrid 'Bronzeteppich'	orange to brown-red	VIII-IX
Euphorbia griffithii 'Fireglow'	orange to brick-red	V-VI
Geum coccineum 'Borrisii'	bright orange	V-VII
Heliopsis scabra 'Spitzentänzerin'	orange-yellow	VII-IX
Kniphofia-hybrids - Farbmischung	orange-yellow to orange	VII-IX
Primula-Bullesiana-hybrids	apricot, orange, salmon	VI-VIII
Trollius chinensis 'Golden Queen'	yellow-orange to orange	VI-VII

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

## Yellow-flower perennials - 8

Yellow-flower perennials are very common. Yellow is used often in various three-colour combinations, for instance in the primary three colours, a combination of red, yellow, and blue, the only pure colours that cannot be gained from any combinations. It also plays an important role in the classic triad of yellow, white and blue.

Genus/species/variety	Flower colour	Flowering time
Achillea filipendulina varieties	golden yellow	VI-IX
Achillea tomentosa 'Aurea'	golden yellow	VI-VII
Alchemilla mollis	yellow-green	VI-VII/IX
Alyssum montanum 'Berggold'	bright yellow	III-V
Alyssum saxatile 'Compactum'	yellow	IV-V
Chrysanthemum-hybrid 'Citrus'	light yellow	IX
Chrysogonum virginianum	light to golden yellow	IV-VII/IX
Coreopsis grandiflora 'Early Sunrise'	golden yellow	VI-IX
Coreopsis verticillata 'Grandiflora'	bright yellow	VI-IX
Coreopsis Verticillata-hybrid 'Moonbeam'	light yellow	VI-IX
Coreopsis Verticillata-hybrid 'Zagreb'	golden yellow	VI-IX
Corydalis lutea	light yellow to yellow	V-IX
Digitalis grandiflora	sulphur yellow	VI-VIII
Epimedium perralderianum 'Frohnleiten'	yellow	III-IV
Epimedium versicolor 'Sulphureum'	sulphur yellow	IV-V
Euphorbia myrsinites	yellow-green	IV-V
Euphorbia polychroma	bright yellow bracts	IV-VI
Geum-hybrid 'Goldball'	yellow	VI-VII
Helenium-hybrid 'Kugelsonne'	yellow	VIII-IX
Helianthemum-hybrid 'Sterntaler'	golden yellow	V-IX
Helianthus decapetalus 'Capenoch Star'	golden yellow	VIII-IX
Heliopsis scabra 'Goldgefieder'	golden yellow	VII-IX
Heliopsis scabra 'Spitzentänzerin'	orange yellow	VII-IX
Hemerocallis-hybrid 'Corky'	golden yellow	VI

Explanation of symbols: I - XII = flowering period month- January (= I) to December (= XII)

*continued on next page*

## 8 - Yellow-flower perennials

continued

Genus/species/variety	Flower colour	Flowering time
Hemerocallis-hybrid 'Stella de Oro'	golden yellow to orange-yellow	VI-VII
Hypericum polyphyllum	golden yellow	VI-VII
Inula ensifolia	yellow	VII-VIII
Inula magnifica	golden yellow	VII-VIII
Iris Barbata Elatior-hybrid 'Goldfackel'	yellow to orange-yellow	V-VI
Kniphofia-hybrid 'Royal Standard'	buds red, flower yellow	VII-IX
Kniphofia-hybrids - mixed colours	yellow to orange-yellow	VII-IX
Lamium galeobdolon 'Florentinum'	light yellow	V-VI
Ligularia species and varieties	yellow to golden yellow	VIII-IX
Lysimachia nummularia	yellow	V-VI
Lysimachia punctata	yellow	VI-VIII
Oenothera missouriensis	light to citrus yellow	VI-IX
Oenothera tetragona	bright golden yellow	VI-VIII
Phlomis russeliana	light yellow	VI-VIII
Potentilla aurea	yellow	V-VII
Primula-Bullesiana-hybrids	yellow, golden yellow, orange-yellow	VI-VIII
Primula elatior	light yellow	III-V
Rudbeckia fulgida 'Goldsturm'	golden yellow with black centre	VII-IX
Rudbeckia nitida 'Herbstsonne'	yellow	VIII-IX
Sedum acre	bright yellow	VI-VII
Sedum floriferum 'Weihenstephaner Gold'	golden yellow	VI-VII
Sedum hybridum 'Immergrünchen'	yellow	VI-VII
Solidago caesia	golden yellow	IX-X
Symphytum grandiflorum	cream yellow	III-V
Verbascum olympicum	bright yellow	VI-VIII
Waldsteinia geoides	yellow	IV-V
Waldsteinia ternata	yellow	IV-V
<b>Aquatic plants</b>		
Caltha palustris	golden yellow	III-IV/IX
Iris pseudacorus	yellow	V-VI
Nuphar lutea	yellow	VI-VIII
Nymphaea-hybrid 'Marliacea Chromatella'	light yellow	VI-VIII
Ranunculus lingua	yellow	VI-VIII

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

### Overview of foliage colours

Genus/species/variety	Flower colour
Hosta fortunei 'Aureo-marginata'	green leaves with yellow margin
Hosta-hybrid 'Sum and Substance'	shoots bright yellow, then citrus yellow to yellowish
Scirpus tabernaemontanii	green stalk with yellow crossways stripes

## Yellow-flower perennials - 8

### Overview of autumn colours

Genus/species/variety	Flower colour
Aconitum carmichaelii 'Arendsii'	yellow (often along with flowers!)
Aruncus dioicus	light yellow to yellow
Convallaria majalis	yellow
Filipendula ulmaria	yellowish
Geranium renardii	light yellow
Hemerocallis-hybrids	yellow to greenish yellow
Hosta species and varieties	bright yellow
Macleaya cordata	light yellow
Polygonatum multiflorum	light yellow
Calamagrostis acutiflora 'Karl Foerster'	yellow
Carex montana	yellow to orange-brown
Miscanthus giganteus	yellow to yellow-orange
Molinia species	bright yellow
Pennisetum alopecuroides	straw-yellow

## Blue-flower perennials - 9

Pure blue is a rather uncommon flower colour. Usually it is confused with purple or even violet and used synonymously. As the "coldest" colour, blue has the least glow; it is seldom used alone, but rather in various colour combinations: for example, in contrast to bright red or in the classic triad yellow-white-blue. Partners of blue are golden yellow and orange hues, which should be used with care lest their bright glows overshadow the effects of the blue (GOETHE: "Blue - an attractive nothing.").

Genus/species/variety	Flower colour	Flowering time
Aconitum cammarum 'Bicolor'	blue with white	VI-VII
Aconitum carmichaelii 'Arendsii'	violet blue	IX-X
Aconitum napellus	dark blue	VI-VII
Ajuga reptans	purple-blue	IV-V
Anchusa azurea 'Dropmore'	bright blue	VI-VII
Aquilegia alpina	pure blue	VI
Aquilegia-hybrid 'Blaue Töne'	intense blue	V-VI
Aster amellus 'Rudolf Goethe'	lavender blue	VII-VIII
Aster-Dumosus-hybrid 'Professor Anton Kippenberg'	blue	IX-X
Aster novae-angliae 'Barr's Blue'	dark lavender blue	IX-X
Aster novi-belgii 'Blaue Nachhut'	light lavender blue	IX-X
Aster novi-belgii 'Dauerblau'	dark purple-blue	IX-X
Aubrieta-hybrid 'Neuling'	lavender blue	IV-V
Aubrieta-hybrid 'Royal Blue'	dark blue	IV-V
Brunnera macrophylla	pure blue	(III) IV-V
Buglossoides purpureo-caerulea	gentian blue	IV-V

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

*continued on next page*

## 9 - Blue-flower perennials

continued

Genus/species/variety	Flower colour	Flowering time
Campanula carpatica 'Blaue Clips'	violet blue	VI-VII
Campanula persicifolia 'Grandiflora Coerulea'	porcelian blue	VI-VII
Campanula poscharskyana 'Blauranke'	light violet blue	VI-VIII
Centaurea montana	blue	V-VII
Ceratostigma plumbaginoides	gentian blue	IX-XI
Delphinium Belladonna-hybrid 'Piccolo'	gentian blue	VI-VII/IX
Delphinium Elatum-hybrid 'Blauwal'	ultramarine blue	VI/VIII
Delphinium Elatum-hybrid 'Waldenburg'	deep, dark blue	VI-VII/IX
Delphinium grandiflorum 'Blauer Zwerg'	bright sky blue	VI-VII
Echinops bannaticus 'Blue Glow'	intense steel blue	VII-IX
Erigeron-hybrid 'Grandiflorus'	purple-blue	VI-VII/IX
Eryngium planum	steel blue	VII-IX
Geranium himalayense 'Gravetye'	bright blue	V-VI
Geranium pratense 'Johnsons Blue'	purple-blue	V-VI
Hosta-hybrid 'Sum and Substance'	lavender blue	VIII-IX
Iris Barbata Nana-hybrid 'Coerulea'	sky blue	IV-V
Iris sibirica 'Phosphorflamme'	various hues of blue	VI
Lavandula angustifolia 'Dwarf Blue'	deep blue	VII-VIII
Lavandula angustifolia 'Munstead'	intense-lavender blue	VII-VIII
Linum perenne 'Saphir'	bright blue	VI-VIII
Lupinus Polyphyllus-hybrid 'Kastellan'	blue with white	VI-VII
Omphalodes verna	sky blue	III-V
Polemonium caeruleum	blue	IV-VI
Pulmonaria angustifolia 'Azurea'	gentian blue	III-V
Salvia nemorosa 'Blauhügel'	blue	VI/VIII
Symphytum azureum	sky blue	IV-VI
Veronica austriaca teucrium 'Königsblau'	bright blue	V-VI
Veronica longifolia	light blue	VII-VIII
Veronica spicata incana	dark blue	VI-VII
Vinca major	blue	IV-V
Vinca minor	blue	IV-VI

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

## Purple and violet-flower perennials - 10

Purple and violet are mixed colours found between pure blue and clear red. Both colour pigments are constantly confused and even held to be blue. Purple lies between blue and violet on the colour spectrum. It is best understood as “blue with a touch of red”; it corresponds to the wild colours of lilacs (German for purple: “purple”) or lavender. Violet is found between purple and red; it is “red with a touch of blue”. It is best represented by *Salvia nemorosa* ‘Ostfriesland’. Both mixed colours flow imperceptibly into one another, which precludes a sharp distinction.

Partners of purple and violet are golden yellow to orange, but also citrus green hues. Deep brown foliage is also special: it can be used as a blackish yellow and even enhances the glow of deep violet in a leaf-flower combination.

Genus/species/variety	Flower colour	Flowering time
<i>Ajuga reptans</i>	purple-blue	IV-V
<i>Ajuga reptans</i> 'Atropurpurea'	violet	IV-V
<i>Aster alpinus</i> 'Dunkle Schöne'	intense violet	V-VI
<i>Aster amellus</i> 'Sternkugel' u.a.	light violet	VII-VIII
<i>Aster amellus</i> 'Veilchenkönigin'	dark ruby-pink	IX-X
<i>Aster novae-angliae</i> 'Purple Dome'	dark ruby-pink	IX-X
<i>Aster novi-belgii</i> 'Dauerblau'	purple-blue	IX-X
<i>Aster novi-belgii</i> 'Schöne von Dietlikon'	purple-blue	IX-X
<i>Aubrieta</i> -hybrids 'Dr. Mules' u.a.	velvety dark violet	IV-V
<i>Calamintha nepeta</i>	whitish purple	VI-IX
<i>Campanula carpatica</i> 'Blaue Clips'	light blue-violet	VI-VII
<i>Campanula glomerata</i> 'Dahurica'	deep violet blue	VI-VIII
<i>Campanula poscharskyana</i> 'Blauranke'	purple to violet blue	VI-VIII
<i>Delphinium Belladonna</i> -hybrid 'Atlantis'	dark blue-violet	VI-VIII/IX
<i>Delphinium Elatum</i> -hybrid 'Finsteraarhorn'	violet blue with black	VII/IX
<i>Erigeron</i> -hybrid 'Grandiflorus'	purple-blue	VI-VII/IX
<i>Geranium himalayense</i> 'Gravetye'	blue with purple, looks violet	V-VI
<i>Geranium magnificum</i>	crimson-violet	V-VI
<i>Hosta crispula</i>	light purple	VI-VII
<i>Hosta fortunei</i> 'Aureomarginata'	light violet	VII-VIII
<i>Hosta lancifolia</i>	crimson-violet	VIII
<i>Hosta sieboldiana</i> 'Elegans'	whitish purple	VII
<i>Hosta ventricosa</i>	crimson-violet	VIII
<i>Hosta tardiflora</i> -hybrid 'Halcyon'	lavender	VIII
<i>Hosta</i> -hybrid 'Sum and Substance'	purple to lavender blue	VIII-IX
<i>Iris Barbata</i> <i>Elatior</i> -hybrid 'Lovely Again'	lavender	V/VIII
<i>Iris Barbata</i> <i>Nana</i> -hybrid 'Cyanea'	light to dark violet	V
<i>Lavandula angustifolia</i> varieties	purple to violet	VII-VIII
<i>Nepeta faassenii</i> varieties	purple	V-IX
<i>Phlox paniculata</i> 'Eventide'	light purple-blue	VIII
<i>Phlox subulata</i> 'G. F. Wilson'	light purple-blue	IV-V
<i>Prunella grandiflora</i>	crimson-violet	VI-VIII
<i>Pulsatilla vulgaris</i>	violet to violet blue	III-IV
<i>Salvia nemorosa</i> 'Ostfriesland'	deep violet	VI/VIII

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

## 11 - Pink, carmine, magenta and crimson perennials

The colours pink and carmine are additional mixed colours. The mixture of white and red pigments produces pink. The less white in the mixture, the more the red will dominate. Intermediate colours are carmine-pink and pure carmine, a cold hue of red. An especially intense carmine with a bit of violet is called magenta-red. Other hues are carmine-red and, finally, ruby, wine and crimson red, all of which are deep hues of red. Their partners are pure white, green-yellow hues and purple.

Genus/species/variety	Flower colour	Flowering time
<i>Achillea Millefolium</i> -hybrid 'Kirschkönigin'	carmine	VI-VII
<i>Anemone hupehensis</i> 'Septembercharme'	light pink-carmine	VIII-IX
<i>Anemone Japonica</i> -hybrid 'Bressingham Glow'	dark ruby-pink	IX-X
<i>Anemone Japonica</i> -hybrid 'Prinz Heinrich'	crimson red	IX-X
<i>Antennaria dioica</i> 'Rubra'	pink-red	V-VI
<i>Arabis arendsii</i> 'Compinkie'	light to dark pink	IV-V
<i>Aster amellus</i> 'Lady Hindlip'	pink	VIII-IX
<i>Aster Dumosus</i> -hybrid 'Herbstgruß vom Bresserhof'	pink-red	IX-X
<i>Aster Dumosus</i> -hybrid 'Kassel'	carmine	IX-X
<i>Aster Dumosus</i> -hybrid 'Wachsenburg'	violet-pink	IX-X
<i>Aster novae-angliae</i> 'Alma Pötschke'	salmon pink to salom-red	VIII-IX
<i>Aster novae-angliae</i> 'Andenken an Paul Gerber'	carmine	IX
<i>Aster novae-angliae</i> 'Rudelsburg'	salmon pink	IX-X
<i>Aster novae-angliae</i> 'Septemberrubin'	ruby red	IX
<i>Aster novi-belgii</i> 'Karminkuppel'	carmine	IX-X
<i>Astilbe Arendsii</i> -hybrid 'Anita Pfeiffer'	salmon pink	VI-VIII
<i>Astilbe Arendsii</i> -hybrid 'Cattleya'	carmine pink	VIII-IX
<i>Astilbe Arendsii</i> -hybrid 'Fanal'	ruby red	VII
<i>Astilbe Arendsii</i> -hybrid 'Rotlicht'	bright ruby red	VII-VIII
<i>Astilbe chinensis pumila</i>	violet-pink	VIII-IX
<i>Astilbe chinensis taquetii</i> 'Purpurlanze'	crimson red	VII-VIII
<i>Aubrieta</i> -hybrid 'Royal Red'	magenta-red	IV-V
<i>Bergenia cordifolia</i>	carmine	IV-V
<i>Bergenia cordifolia</i> 'Rotblum'	carmine	IV-V
<i>Bergenia</i> -hybrid 'Silberlicht'	white with carmine	IV-V
<i>Centranthus ruber</i> 'Coccineus'	carmine pink	VI-IX
<i>Chrysanthemum</i> -hybrid 'Fellbacher Wein'	wine red	IX-X
<i>Chrysanthemum</i> -hybrid 'Orchid Helen'	purple-pink	VIII-IX
<i>Dianthus deltoides</i> 'Brilliant'	bright ruby red	VI-VII
<i>Dianthus-Plumarius</i> -hybrid 'Maggie'	carmine pink with red	VI-VII
<i>Dicentra eximia</i>	crimson-pink	VI-VII
<i>Dicentra spectabilis</i>	pink to carmine	V-VI
<i>Digitalis purpurea</i> 'Gloxiniaeflora'	pink, carmine, crimson	VI-VII
<i>Echinacea purpurea</i>	carmine	VII-IX
<i>Epimedium rubrum</i> 'Coccineum'	carmine with white	IV-V
<i>Eupatorium fistulosum</i> 'Atropurpureum'	crimson-carmine	VIII-IX

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

## Pink, carmine, magenta and crimson perennials - 11

Genus/species/variety	Flower colour	Flowering time
Geranium catabrigiense 'Cambridge'	dark pink	VI-VII
Geranium endressii	pink	VI-X (XI)
Geranium macrorrhizum 'Ingwersen'	light to pale pink	V-VII
Geranium macrorrhizum 'Spessart'	whitish pink	V-VII
Geranium renardii	whitish pink	VI-VII
Geranium sanguineum	carmine to carmine-red	V-VI
Gypsophila repens 'Rosea'	pink	V-VII
Gypsophila Repens-hybrid 'Rosenschleier'	pink	V-VIII
Helianthemum-hybrid 'Cerise Queen'	carmine	V-IX
Helianthemum-hybrid 'Lawrensons Pink'	intense pink	V-IX
Helianthemum-hybrid 'Rubin'	ruby red	V-IX
Hemerocallis-hybrid 'Pink Damask'	pink with salmon-orange	VI-VII
Lamium maculatum 'Chequers'	carmine pink	IV-V
Lamium maculatum 'Silbergroschen'	crimson-pink	IV-V
Lathyrus latifolius	carmine	VI-VII
Lupinus Polyphyllus-hybrid 'Schlossfrau'	pink with white	VI-VII
Lychnis viscaria 'Plena'	carmine pink	V-VI
Lythrum salicaria	carmine	VI-VIII
Monarda-hybrid 'Croftway Pink'	salmon pink	VII-IX
Monarda-hybrid 'Prärienacht'	deep crimson red	VII-IX
Origanum Laevigatum-hybrid 'Herrenhausen'	red-violet	VII-IX
Origanum vulgare 'Compactum'	violet-pink	VI-IX
Paeonia Lactiflora-hybrid 'Bunker Hill'	bright carmine	VI
Paeonia Lactiflora-hybrid 'Sarah Bernhardt'	light silvery pink	V-VI
Papaver orientale 'Königin Alexandra'	salmon pink	VI
Phlox paniculata varieties	pink to carmine	VIII
Phlox subulata 'Temiskaming'	crimson red	IV-V
Phuopsis stylosa	pink	VI-IX
Polygonum affine 'Darjeeling Red'	pink to crimson-pink	VI-IX
Primula Bullesiana-hybrid	salmon pink, whitish pink	VI-VIII
Pulmonaria rubra 'Dora Bielefeld'	bright pink	IV-V
Saxifraga urbium 'Elliott'	pink	V-VI
Sedum spectabile 'Rosenteller'	pale carmine pink	VIII-X
Sedum telephium 'Herbstfreude'	carmine-crimson to carmine-brown	IX-X
Sedum spurium 'Fuldaglut'	carmine	VII-VIII
Tellima grandiflora	greenish pink	V-VI
Thymus doerfleri 'Bressingham Seedling'	pink	V-VI
Thymus serpyllum 'Coccineus'	crimson red	VI-VIII
<b>Aquatic plants</b>		
Butomus umbellatus	pink	VII-IX
Nymphaea-hybrid 'James Brydon'	carmine	VI-VIII
Nymphaea odorata 'Rosennymphe'	intense pink, light pink	VI-VIII

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

*continued on next page*

## 12 - White and grey perennials

White is an indispensable flower colour. This neutral colour is in-between all other hues; it both separates and combines. Physically, the colour white is a mixture of complementary colours, such as blue with orange, violet with yellow, green with red. Thus, white is a pleasant junction between contrasting colours. With their maximum brightness, white perennials take the glow out of extremely bright flowers and make their neighbours appear darker.

Thanks to its brightness, white is the only colour that is recognisable at dawn and dusk. Silvery and grey-tomentose leaf varieties are also considered part of the colour white. Grey is merely a subdued continuation of the colour white. It reduces the colour contrasts.

Genus/species/variety	Flower colour	Flowering time
<i>Achillea ptarmica</i> 'Boule de Neige'	white	VII-IX
<i>Aconitum cammarum</i> 'Bicolor'	blue with white	VI-VII
<i>Anaphalis triplinervis</i> 'Sommerschnee'	milky white	VI-VII
<i>Anemone Japonica</i> -hybrid 'Honorine Jobert'	pure white	VIII-IX
<i>Anemone nemorosa</i>	white, light pink on the outside	III-IV
<i>Anemone sylvestris</i>	white	IV-VI
<i>Arabis caucasica</i> 'Schneehaube'	white	IV-V
<i>Arabis procurrens</i> 'Glacier'	white	IV-V
<i>Artemisia ludoviciana</i> 'Silver Queen'	grey	VI-VII
<i>Artemisia schmidtiana</i> 'Nana'	grey-white	VII
<i>Artemisia stelleriana</i>	yellowish grey	VII-VIII
<i>Aruncus aethusifolius</i>	milky white	V-VI
<i>Aruncus dioicus</i>	cream-white	VI-VII
<i>Aster divaricatus</i>	pale white	VIII-IX
<i>Aster Dumosus</i> -hybrid 'Schneekissen'	white	IX-X
<i>Astilbe Arendsii</i> -hybrid 'Brautschleier'	white to cream-white	VII-VIII
<i>Astrantia major</i>	silvery white with pink shimmer	VI-VII
<i>Campanula carpatica</i> 'Weiße Clips'	pure white	VI-VII
<i>Campanula glomerata</i> 'Alba'	pure white	V-VI
<i>Campanula persicifolia</i> 'Grandiflora Alba'	pure white	VI-VII
<i>Cerastium tomentosum</i> 'Silberteppich'	pale white	V-VI
<i>Chrysanthemum</i> -hybrid 'Edelweiß'	white	IX-X
<i>Chrysanthemum</i> -hybrid 'White Bouquet'	white with pink shimmer	IX-X
<i>Chrysanthemum leucanthemum</i> 'Maikönigin'	milky white	V
<i>Chrysanthemum maximum</i> varieties	milky white	VI-VII
<i>Chrysanthemum serotinum</i>	pale white	IX-X
<i>Cimicifuga racemosa cordifolia</i>	cream-white	VIII-IX
<i>Cimicifuga ramosa</i> 'Atropurpurea'	white with pink shimmer	IX
<i>Convallaria majalis</i>	milky white	V
<i>Delphinium Belladonna</i> -hybrid 'Casa Blanca'	white	VI-VII/IX
<i>Dianthus deltoides</i> 'Alba'	white with pink mottling	VI
<i>Dianthus Plumarius</i> -hybrid 'Haytor'	white	VI-VII
<i>Dicentra spectabilis</i> 'Alba'	pure white	V-VI

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

## White and grey perennials - 12

Genus/species/variety	Flower colour	Flowering time
<i>Dryas suendermannii</i>	cream white to light yellow	V-VI
<i>Epimedium youngianum</i> 'Niveum'	pale white	IV-V
<i>Filipendula ulmaria</i>	cream-white	VI-X
<i>Fragaria vesca</i>	white	IV-V
<i>Galium odoratum</i>	white	IV-V
<i>Geranium catabrigiense</i> 'Biokovo'	white with pink shimmer	VI-VII
<i>Geranium clarkei</i> 'Kashmir White'	white with brown-pink veins	VI-VII
<i>Geranium macrorrhizum</i> 'Spessart'	white with light tint	V-VI
<i>Geranium renardii</i>	grey-white with violet veins	VI-VII
<i>Gypsophila paniculata</i> 'Schneeflocke'	pale white	VI-VII/VIII
<i>Helianthemum</i> -hybrid 'Snow Queen'	white	V-IX
<i>Helleborus niger</i>	milky white with a green shimmer	XII-II
<i>Hosta</i> -hybrid 'Royal Standard'	milky white	VII-VIII
<i>Iberis sempervirens</i> varieties	bright white	VI-VII
<i>Macleaya cordata</i>	cream-white, brown shimmer	VII-VIII
<i>Matricaria caucasica</i>	white	V-VI
<i>Omphalodes verna</i> 'Alba'	white	III-V
<i>Phlox paniculata</i> 'Kirmesländer'	white with pink bud	VIII
<i>Phlox paniculata</i> 'Nymphenburg'	white with ivory-white bud	VIII-IX
<i>Phlox paniculata</i> 'Pax'	pure white	VIII-IX
<i>Phlox subulata</i> 'White Delight'	pure white	IV-V
<i>Physalis alkekengi</i> <i>franchetii</i>	greenish cream-white	VI
<i>Polygonatum multiflorum</i>	greenish white	V-VI
<i>Pulmonaria saccharata</i> 'Sissinghurst White'	pure white	IV-V
<i>Rodgersia aesculifolia</i>	cream-white	VI-VII
<i>Rodgersia pinnata</i>	cream-white	VI-VII
<i>Sagina subulata</i>	white	VI-VII
<i>Sedum album</i> 'Coral Carpet'	white with pink shimmer	VI-VII
<i>Sedum spurium</i> 'Album Superbum'	white	VII-VIII
<i>Tiarella cordifolia</i>	pale white with pink shimmer	V-VI
<b>Grasses</b>		
<i>Cortaderia selloana</i>	silvery white	IX-X
<i>Miscanthus sinensis</i> 'Silberfeder'	silvery	IX-X
<i>Stipa pulcherrima</i>	silvery	V-VI
<b>Aquatic plants</b>		
<i>Alisma plantago-aquatica</i>	white to whitish pink	VI-IX
<i>Nymphaea alba</i>	milky white	VI-VIII
<i>Sagittaria sagittifolia</i>	white	VI-VIII
<i>Stratiotes aloides</i>	white	VI-VIII

Explanation of symbols: I - XII = flowering period from January (= I) to December (= XII)

## 13 - Fragrant and aromatic perennials

Genus/species/variety	Scent	Aroma	Genus/species/variety	Scent	Aroma
<i>Achillea filipendulina</i> varieties		AF	<i>Galium odoratum</i>	f	AF
<i>Achillea millefolium</i> varieties		AF	<i>Geranium macrorrhizum</i> varieties		(AF)
<i>Achillea tomentosa</i> 'Aurea'		AF	<i>Geranium magnificum</i>		af
<i>Alchemilla mollis</i>	f		<i>Hemerocallis</i> -hybrids	f	
<i>Alyssum montanum</i> and others	F		<i>Hosta</i> species and varieties	f/F	
<i>Anemone sylvestris</i>	f		<i>Iris Barbata</i> -hybrids varieties	f/F	
<i>Arabis caucasica</i> varieties	F		<i>Lavandula angustifolia</i> varieties	F	AF
<i>Artemisia ludoviciana</i> 'Silver Queen'	(F)	AF	<i>Lupinus-Polyphyllus</i> -hybrids	f	
<i>Artemisia schmidtiana</i> 'Nana'		(AF)	<i>Lysimachia punctata</i>	f	
<i>Artemisia stelleriana</i>		(AF)	<i>Monarda</i> -hybrids varieties	F	AF
<i>Asarum europaeum</i>		af	<i>Nepeta faassenii</i> varieties		AF(AF)
<i>Aster divaricatus</i>	f		<i>Oenothera missouriensis</i>	f	
<i>Aster Dumosus</i> -hybrids	f		<i>Origanum</i> species and varieties		AF
<i>Aster novae-angliae</i>		(AF)	<i>Paeonia Lactiflora</i> -hybrids i.S.	F	
<i>Astilbe-Arendsii</i> -hybrids	f		<i>Papaver orientale</i> varieties	f	
<i>Astrantia major</i>		af	<i>Phlox paniculata</i>	F	
<i>Aubrieta</i> -hybrids	f		<i>Phlox subulata</i>	f	
<i>Brunnera macrophylla</i>	f		<i>Phuopsis stylosa</i>	f	AF
<i>Calamintha nepeta nepeta</i>	f	AF	<i>Polemonium caeruleum</i>	f	
<i>Centranthus ruber</i>	f		<i>Primula elatior</i>	f	
<i>Cerastium tomentosum</i> 'Silberteppich'	f		<i>Salvia nemorosa</i> varieties		(AF)
<i>Chrysanthemum</i> -hybrids	(F)	AF	<i>Sedum telephium</i> 'Herbstfreude'	f	
<i>Cimicifuga racemosa cordifolia</i>	f		<i>Tellima grandiflora</i>	F	
<i>Cimicifuga ramosa</i> 'Atropurpurea'	f		<i>Thymus</i> species and varieties		AF
<i>Convallaria majalis</i>	F				
<i>Dianthus-Plumarius</i> -hybrids	F		<b>Aquatic plants</b>		
<i>Eupatorium fistulosum</i> varieties	f		<i>Nuphar lutea</i>	f	
<i>Filipendula ulmaria</i>	f	AF	<i>Nymphae</i> -hybrids	f	

(also see table "Fragrant and aromatic plants")

Explanation of symbols:

F = pleasant fragrance

(F) = pungent, somewhat unpleasant scent (subjective)

f = slightly fragrant (with one's nose directly in the flower)

AF = aromatic foliage

(AF) = very aromatic foliage

af = slightly fragrant to aromatic foliage

Genus/species/variety	Poisonous plant part	Degree of poison	Taste/note
All species of Aconitum	whole plant	+++	sweetish to spicy-hot
Alisma plantago-aquatica	whole plant, especially milky sap	(+)	bitter, spicy-hot
All species of Anemone	whole plant	+	unpleasant
All species of Aquilegia	whole plant	+	
Artemisia ludoviciana	whole plant	(+)	very bitter
Artemisia stelleriana	whole plant	(+)	very bitter
Asarum europaeum	whole plant	+	burning, numbing feeling
Caltha palustris	whole plant	+	spicy-hot
All species of Cimicifuga	whole plant	+	bitter
All species of Delphinium	whole plant	+++	
Dicentra spectabilis	roots	+	
All species of Digitalis	whole plant	+++	
Dryopteris filix-mas	young plant, roots	+	
All species of Epimedium	leaves	(+)	
Eupatorium fistulosum	whole plant	+	aromatic-bitter
All species of Euphorbia	milky sap	++	spicy, bitter, causes great swelling
Galium odoratum	whole plant	(+)	nice scent, causes headaches
All species of Helleborus	whole plant	+++	bitter and burning hot
All species of Iberis	seeds, leaves	+	bitter
Iris pseudacorus	rhizome, leaves	+	burning hot
Lathyrus latifolius	seeds	+	
Lupinus polyphyllus	seeds	++	bitter
Macleaya cordata	milky sap	+	
Nuphar lutea	rhizome, leaves	+	
All species of Nymphaea	whole plant	+	salty-bitter
Physalis alkekengi	whole plant	+	tangy-sour
Polygonatum multiflorum	berries	+	scratchy
All species of Pulsatilla	whole plant	+	
All species of Ranunculus	whole plant	+	burning
All species of Trollius	whole plant	+	
All species of Vinca	whole plant	+	

(Also see the preliminary remarks on the list "Poisonous plants".)

Explanation of symbols: +++ = extremely poisonous, select with caution  
 ++ = very poisonous  
 + = poisonous  
 (+) = slightly poisonous

## 15 - Perennials with autumn colours

There may not be as many species of perennials with spectacular autumn colours as there are among trees and shrubs, but some varieties do reveal their attractive sides in autumn with a surprising, attractive display of autumn colours. Most, however, go out inconspicuously with grey-brown hues and wither unnoticed at some point. Also, some evergreen shrubs turn bronze, often with a metallic sheen, under the influence of low temperatures.

Finally, the perennials that draw attention with their attractive, geometric syncarpy long into winter should not be forgotten. With expert advice, you can select many perennials (cf. table "Evergreen perennials") for attractive autumn and winter beds.

Genus/species/variety	Autumn colours / Winter colours	Syncarpy
Achillea filipendulina varieties	yellow	long-stem umbels
Aconitum carmichaelii 'Arendsii'	yellow (often along with flowers!)	
Ajuga reptans 'Atropurpurea'	winter violet to bronze red	
Aruncus aethusifolius	bright orange to tile-red	
Aruncus dioicus	strong yellow	towering syncarpy
Aster divaricatus	pale yellow	
Astilbe Arendsii-hybrids	yellow	stiff brown syncarpy
Astrantia major	yellowish	
Bergenia species and varieties	winter metallic red-brown	
Ceratostigma plumbaginoides	orange-red (along with flowers)	
Chrysanthemum-hybrids	reddish (along with late flowers)	
Convallaria majalis	yellow	
Coreopsis verticillata	green-yellow to bronze	
Epimedium perralderianum	winter bronze	
Epimedium rubrum 'Coccineum'	reddish	
Epimedium versicolor 'Sulphureum'	reddish	
Eupatorium fistulosum 'Atropurpureum'	yellowish to bright golden yellow	silvery, woolly heads
Euphorbia griffithii 'Fireglow'		bright-red stems
Euphorbia polychroma	yellow-orange	red stems
Filipendula ulmaria	yellowish	
Geranium macrorrhizum varieties	orange-yellow	
Geranium magnificum	orange	
Geranium renardii	light yellow	
Geranium sanguineum	brick to dark red	
Hemerocallis-hybrids	yellow or yellow-green	
Heuchera micrantha 'Palace Purple'	blood-red	
Hosta species and varieties	bright golden yellow	
Lysimachia punctata	yellowish	
Lythrum salicaria	bright blood-red	
Macleaya cordata	light yellow	loose syncarpy
Monarda-hybrids		stiff syncarpy
Paeonia Lactiflora-hybrids	yellowish to orange-brown, sometimes pink	
Physalis alkekengi franchetii	yellow	bright orange fruits

## Perennials with autumn colours - 15

Genus/species/variety	Autumn colours / Winter colours	Syncarpy
<i>Polygonatum multiflorum</i>	light yellow (along with fruit)	black-blue fruit
<i>Polygonum affine</i> and varieties	bronze	
<i>Pulsatilla vulgaris</i>		silvery syncarpy
<i>Rodgersia</i> species	yellowish brown	
<i>Sedum album</i> 'Coral Carpet'	winter brick-red	
<i>Sedum spectabile</i> 'Rosenteller'	yellowish	red-brwon fruit umbels
<i>Sedum telephium</i> 'Herbstfreude'	yellowish	brown-violet umbels
<i>Tiarella cordifolia</i>	winter brick-red	
<i>Verbascum olympicum</i>		towering syncarpy
<i>Waldsteinia geoides</i>	yellowish	
<b>Grasses</b>		
<i>Calamagrostis acutiflora</i> 'Karl F.'	yellow	persistent fruit spikes
<i>Carex montana</i>	yellow to orange brown	
<i>Cortaderia selloana</i>		flower panicles in autumn
<i>Festuca mairei</i>		flower stalks in autumn
<i>Miscanthus giganteus</i>	yellowish orange	inflorescences silvery violet
<i>Miscanthus sinensis</i> 'Silberfeder'	straw-yellow	silvery syncarpy
<i>Molinia</i> species	bright yellow	transparent fruit panicles
<i>Panicum virgatum</i> 'Rehbraun'	orange-red to dark red	transparent fruit panicles
<i>Pennisetum alopecuroides</i>	straw-yellow	
<b>Ferns</b>		
<i>Athyrium filix-femina</i>	pale yellowish	
<i>Dryopteris filix-mas</i>	yellowish to brownish	
<i>Matteuccia struthiopteris</i>	yellowish	stiff, black-brown fruit fronds
<i>Osmunda regalis</i>	yellowish to yellow	
<i>Polystichum setiferum</i> and varieties	yellowish to reddish	
<b>Aquatic plants</b>		
<i>Phragmites australis</i>	like straw	silver fruit panicles
<i>Typha angustifolia</i>		red-bown syncarpy

## 16 - Evergreen perennials

Like trees and shrubs, perennials also have evergreen and nearly evergreen forms. Most perennials in our climatic zone tend to be nearly evergreen, i.e. the foliage stays green through winter and gradually dies during shooting in early spring. Evergreen perennials often originate from snowy, very mild regions where they either live through the winter with their green foliage covered by plentiful snow or are hardly damaged by frost. Therefore, these perennials should be covered with twigs and foliage at the beginning of the cold season, especially where little snow generally falls in winter. Even when such perennials were damaged, they regenerate from the root stock unless winter was extreme.

Genus/species/variety	Foliage	Genus/species/variety	Foliage
<i>Acaena buchananii</i> inter alia	evergreen	<i>Nepeta faassenii</i>	somewhat evergreen
<i>Achillea tomentosa</i> 'Aurea'	nearly evergreen	<i>Pachysandra terminalis</i>	evergreen
<i>Ajuga reptans</i> and varieties	nearly evergreen	<i>Phlomis russeliana</i>	nearly evergreen
<i>Alyssum saxatile</i> 'Compactum'	nearly evergreen	<i>Phuopsis stylosa</i>	nearly evergreen
<i>Antennaria dioica</i> 'Rubra'	nearly evergreen	<i>Sagina subulata</i>	nearly evergreen
<i>Arabis cuacastica</i> varieties	nearly evergreen	<i>Saxifraga urbium</i> 'Elliott'	(nearly) evergreen
<i>Arabis procurrans</i> 'Glacier'	nearly evergreen	<i>Sedum acre</i>	evergreen
<i>Asarum europaeum</i>	evergreen	<i>Sedum album</i> varieties	evergreen
Varities of <i>Aubrieta</i> -hybrids	(nearly) evergreen	<i>Sedum hybridum</i> 'Immergrünchen'	(nearly) evergreen
<i>Bergenia</i> species and varieties	(nearly) evergreen	<i>Sedum spurium</i> 'Album Superbum'	shoots nearly evergreen
<i>Centranthus ruber</i>	nearly evergreen	<i>Stachys byzantina</i> 'Silver Carpet'	nearly evergreen
<i>Cerastium tomentosum</i> 'Silberteppich'	(nearly) evergreen	<i>Veronica spicata</i> incana	nearly evergreen
<i>Dianthus Plumarius</i> -hybrids	nearly evergreen	<i>Waldsteinia ternata</i>	nearly evergreen
<i>Dryas suendermannii</i>	(nearly) evergreen	<i>Vinca</i> species and varieties	evergreen
<i>Epimedium perralderianum</i> 'Frohnleiten'	nearly evergreen		
<i>Euphorbia myrsinites</i>	evergreen	<b>Grasses</b>	
<i>Galium odoratum</i>	nearly evergreen	<i>Carex morrowii</i> 'Variegata'	evergreen
<i>Geranium endressii</i>	somewhat evergreen	<i>Carex pendula</i>	evergreen
<i>Helianthemum</i> -hybrids	(nearly) evergreen	<i>Carex plantaginea</i>	evergreen
<i>Helleborus foetidus</i>	evergreen	<i>Cortaderia selloana</i>	evergreen
<i>Helleborus niger</i>	nearly evergreen	<i>Deschampsia cespitosa</i>	nearly evergreen
<i>Iberis sempervirens</i> varieties	evergreen	<i>Festuca cinerea</i>	evergreen
<i>Iris Barbata</i> -hybrids	nearly evergreen	<i>Festuca mairei</i>	usually nearly evergreen
<i>Kniphofia</i> -hybrids	nearly evergreen	<i>Festuca ovina</i>	(nearly) evergreen
<i>Lamium galeobdolon</i> 'Florentinum'	nearly evergreen	<i>Helictotrichon sempervirens</i>	evergreen
<i>Lamium maculatum</i>	somewhat evergreen	<i>Luzula sylvatica</i> and varieties	evergreen
<i>Lavandula angustifolia</i>	evergreen		
<i>Matricaria caucasica</i>	nearly evergreen	<b>Ferns</b>	
		<i>Phyllitis scolopendrium</i>	evergreen
		<i>Polystichum setiferum</i>	usually nearly evergreen

Also see tips on evergreen deciduous plants.

Colourful perennials are indispensable for special effects. On the one hand, they can support the flower colour in monochrome gardens, above all because the flowering period is always shorter than the leaf colours; on the other, contrasts can be enhanced. For instance, dark areas can be lightened with yellow, white or silver-leaf perennials, or light areas can be toned down with red or brown-leaf plants.

Genus/species/variety	Colour
<b>Blue to blue-green foliage</b>	
Dianthus Plumarius-hybrids	silvery blue
Euphorbia myrsinites	blue-green
Hosta sieboldiana 'Elegans'	steel blue
Hosta tardiflora-hybrid 'Halcyon'	intense pale blue
Hypericum polyphyllum	grey-blue
Macleaya cordata	blue-green to steel blue
Sedum telephium 'Herbstfreude'	plae blue to blue-green
<b>Grasses</b>	
Festuca cinerea	blue to grey-blue
Helictotrichon sempervirens	steel blue
<b>Yellow and yellow foliage</b>	
Hosta fortunei 'Aureo-marginata'	green leaves with yellow margin
Hosta-hybrid 'Sum and Substance'	shoots bright yellow, then citrus yellow to yellowish-green
Scirpus tabernaemontanii	green stalk, yellow crossways stripes
<b>Red and brown foliage</b>	
Acaena microphylla	metallic bronze red
Acaena microphylla 'Kupferteppich'	bronze red, fruits brick-red
Ajuga reptans 'Atropurpurea'	shoots crimson red, then red-brown
Aruncus aethusifolius	orange-red in autumn
Ceratostigma plumbaginoides	tile-red in autumn
Cimicifuga ramosa 'Atropurpurea'	shoots dark red, later bronze red
Epimedium rubrum 'Coccineum'	shoots red, then green, autumn red
Euphorbia griffithii 'Fireglow'	bright red stems in autumn
Geranium macrorrhizum varieties	brick-red in autumn
Geranium magnificum	brick-red in autumn
Heuchera micrantha 'Palace Purple'	black-red
Lythrum salicaria	brick to blood-red in autumn
Paeonia Lactiflora-hybrids varieties	shoots dark red
Sedum album 'Coral Carpet'	brick to coral red
Sedum hybridum 'Immergrünchen'	leaves brick-red in winter
Sedum spurium 'Fuldaglut'	bronze red

continued on next page

## 17 - Colourful perennials

continued

Genus/species/variety	Colour
<b>White, silvery and silvery grey</b>	
Achillea species	shoots silvery, then grey-green
Alyssum montanum 'Berggold'	silvery to grey-green
Alyssum saxatile 'Compactum'	silvery, then light grey
Anaphalis triplinervis 'Sommerschnee'	silvery white, then pale grey
Antennaria dioica 'Rubra'	silvery, then grey-green
Artemisia ludoviciana 'Silver Queen'	bright silvery white, then grey
Artemisia schmidtiana 'Nana'	silky silvery grey
Artemisia stelleriana	bright silvery grey
Cerastium tomentosum 'Silberteppich'	bright silvery white, then grey
Geranium renardii	velvety grey, then grey-green
Gypsophila paniculata 'Schneeflocke'	grey to gray-green
Helianthemum-hybrid 'Snow Queen'	silvery grey
Hosta crispula	green leaves with white margin
Lamium maculatum varieties	pale green, silvery spots
Lavandula angustifolia varieties	slender to large white spots
Nepeta faassenii and varieties	silvery grey when shooting, grey
Potentilla aurea	pale grey to grey-green
Pulmonaria saccharata varieties	leaves with pale white spots
Pulsatilla vulgaris	leaves with pale white spots
Stachys byzantina	grey, silvery syncarpy
Verbascum olympicum	velvety silver
Veronica spicata incana	silvery tomentose
	flour-white, then silver-grey

## 18 - Rampant perennials

Unlike perennials that form clumps and cushions, rampant perennials do not have clearly defined habits. They either form loose thickets or large crops that spread as far the situation allows. If such plants are put in cultivated beds, they must be reduced regularly; sometimes rhizome barriers are useful. The rampant perennials are, however, excellent for creating greenery safely and quickly. The indigenous species are used in particular for biological engineering purposes. These species are also good for wild gardens.

Genus/species/variety	Means of propagation
Acaena buchananii	runners, layers
Acaena microphylla	runners, layers
Achillea ptarmica 'Boule de Neige'	runners
Ajuga reptans and varieties	layers

Genus/species/variety	Means of propagation
Anemone sylvestris	runners
Artemisia ludoviciana 'Silver Queen'	runners
Aruncus dioicus	seeds
Aster divaricatus	runners
Astilbe chinensis taquetii 'Purpurlanze'	runners
Astrantia major	seeds
Brunnera macrophylla	seeds
Buglossoides purpureoerulea	layers
Campanula poscharskyana 'Blauranke'	seeds
Centaurea montana	runners
Centranthus ruber	seeds
Cerastium tomentosum 'Silberteppich'	runners, layers
Chrysogonum virginianum	layers
Convallaria majalis	runners
Corydalis lutea	seeds
Euphorbia griffithii 'Fireglow'	runners
Filipendula ulmaria	runners, seeds
Geranium sanguineum	runners, layers, seeds
Lamium galeobdolon 'Florentinum'	layers
Lathyrus latifolius	layers
Lysimachia punctata	runners, seeds
Lythrum salicaria	seeds
Macleaya cordata	runners
Nepeta faassenii 'Six Hills Giant'	seeds
Omphalodes verna	layers
Phuopsis stylosa	runners, layers
Physalis alkekengi franchetii	runners
Polygonum affine 'Darjeeling Red'	layers
Sedum spurium 'Album Superbum'	layers
Stachys byzantina	layers
Symphytum azureum	runners, seeds
Symphytum grandiflorum	runners, layers
Tellima grandiflora	seeds
<b>Grasses</b>	
Carex pendula	seeds
Luzula sylvatica	runners

continued on next page

## 18 - Rampant perennials

continued

Genus/species/variety	Means of propagation
<b>Ferns</b>	
Athyrium filix-femina	seeds
Dryopteris filix-mas	seeds
Matteuccia struthiopteris	runners
<b>Aquatic plants</b>	
Alisma plantago-aquatica	runners, seeds
Butomus umbellatus	runners
Iris pseudacorus	runners
Nuphar lutea	runners, layers
Nymphaea alba	runners
Phragmites australis	runners
Ranunculus lingua	runners
Sagittaria sagittifolia	runners
Stratiotes aloides	layers
Typha angustifolia	runners

## 19 - Sun-loving perennials

All sun-loving perennials need a lot of light but vary according to location. The column for locations lists the preferred locations, not all possible variants. Their typical occurrence in the wild is especially important for wild varieties, and this also goes for the varieties and is derived for the hybrids.

Genus/species/variety	Light span	Preferred location
Acaeana species and varieties	sun - light shade	grasslands, river beds
Achillea filipendulina varieties	sun	rocky slopes, meadows
Achillea millefolium 'Kirschkönigin'	sun	(semi-)xeric grassland communities
Achillea ptarmica 'Boule de Neige'	sun - light shade	damp meadows, swamps
Achillea tomentosa 'Aurea'	sun	dry meadows
Ajuga reptans and varieties	sun - semi-shade	moist, nutritious meadows
Alchemilla mollis	sun - light shade	river embankments, edges of forests
Alyssum montanum 'Berggold'	sun	rocky xeric grassland communities
Alyssum saxatile 'Compactum'	sun	mountainous meadows, gravelly surfaces
Anaphalis triplinervis 'Sommerschnee'	sun	mountain meadows, rocky slopes
Anchusa azurea 'Dropmore'	sun	borders of paths, gravelly surfaces
Anemone sylvestris	sun - light shade	edges of forests, light pine forests
Antennaria dioica 'Rubra'	sun - no direct sunlight	heaths, pine forests
Arabis caucasica varieties	sun	rocky grass slopes

Genus/species/variety	Light span	Preferred location
Artemisia ludoviciana 'Silver Queen'	sun	sandy prairies, light edges of forests
Artemisia schmidtiana 'Nana'	sun	sandy-gravelly slopes, cliffs
Artemisia stelleriana	sun	dunes, coasts
Aster alpinus	sun	mountainous rocky grasslands
Aster amellus	sun	bushes and edges of forests
Aster divaricatus	sun - semi-shade	light pine-oak forests, clear cutting
Aster dumosus	sun	moist edges of forests
Aster ericoides	sun	moderately dry edges of bushes
Aster novae-angliae	sun	moist meadows, embankments, bushes
Aster novi-belgii	sun - no direct sunlight	light alluvial soil, moist meadows, embankments
Aubrieta-hybrids	sun	rocky slopes
Buglossoides purpureocaerulea	sun - semi-shade	mixed forests rich with herbage
Calamintha nepeta nepeta	sun	gravelly ground, in walls
Campanula carpatica	sun - light shade	boulder gravel, cracks in rock
Campanula glomerata	sun - light shade	meadows, sunny edges of forests
Campanula poscharskyana	sun - light shade	gravelly ground
Centranthus ruber	sun - no direct sunlight	rocky-gravelly ground, maquis
Cerastium tomentosum 'Silberteppich'	sun	gravelly ground
Ceratostigma plumbaginoides	sun - semi-shade	bushes, light forests
Chrysanthemum-hybrids	sun	rocky, chalky slopes, bedrock
Chrysanthemum leucanthemum	sun	meadows
Chrysanthemum maximum	sun	mountian meadow
Chrysanthemum serotinum	sun - light shade	alluvial soil, moist meadows, embankments
Coreopsis grandiflora	sun	edges of forests
Coreopsis verticillata	sun	edges of forests, bushes
Delphinium Elatum-hybrids and others	sun - no direct sunlight	mountian meadows, light forests
Delphinium grandiflorum	sun	gravelly ground
Dianthus deltoides	sun	poor grasslands, edges of bogs
Dianthus plumarius	sun	bedrock grasslands, gravelly, rocky steppes
Digitalis grandiflora	sun - semi-shade	edges of forests, clearings
Dryas suendermannii	sun - no direct sunlight	gravel islands in rivers, rocky grasslands
Echinacea purpurea	sun	prairies, edges of paths and forests
Echinops bannaticus	sun	bedrock slopes, sunny bushes
Erigeron-hybrid	sun	prairies
Eryngium planum	sun	sandy surfaces, xeric grassland
Eupatorium fistulosum	sun - semi-shade	mixed forests rich with herbage alluvial soil, moist meadows
Euphorbia griffithii	sun - light shade	light pine forests, clearings
Euphorbia myrsinites	sun	rocky-gravelly ground, edges of forests
Euphorbia polychroma	sun - light shade	light forests, edges of bushes
Filipendula ulmaria	sun - semi-shade	moist meadows to swamps, embankments
Fragaria vesca	sun - semi-shade	light edges of forests

continued on next page

## 19 - Sun-loving perennials

continued

Genus/species/variety	Light span	Preferred location
Geranium cantabrigiense	sun - light shade	rocky-gravelly ground, edges of forests
Geranium endressii	sun - semi-shade	mountainous bushes, edges of forests
Geranium himalayense	sun - light shade	rocky-gravelly, edges of forests
Geranium macrorrhizum	sun - semi-shade	talus, scree, light forests
Geranium renardii	sun - light shade	rocky meadows, bushes
Geranium sanguineum	sun - semi-shade	xeric grassland, light forests
Geum species and varieties	sun - light shade	embankments, moist meadows, bushes
Gypsophila paniculata	sun	semi-xeric grasslands and steppes
Gypsophila repens	sun	gravelly slopes, gravelly embankments
Helenium-hybrids	sun	moist meadows, valley depressions
Helianthemum-hybrids	sun - light shade	rocky, poor grasslands, edges of forests
Helianthus decapetalus	sun	clearings, edges of forests
Heliopsis helianthoides scabra	sun	edges of forests, light bushes
Hemerocallis-hybrids	sun - light shade	moist meadows, forests on alluvial soil
Hypericum polyphyllum	sun	rocky-gravelly ground, rocky slopes
Iberis sempervirens	sun - no direct sunlight	moist, rocky slopes
Inula ensifolia	sun	steppes, edges of bushes
Inula magnifica	sun - semi-shade	moist, mountainous birch forests
Iris-Barbata-Elatior	sun	steppes, gravelly ground
Iris sibirica	sun - light shade	moist meadows and bogs, ditches
Kniphofia-hybrids	sun	moist meadows, mountain slopes
Lathyrus latifolius	sun - light shade	edges of hedges
Lavandula angustifolia	sun	maquis, rocky ground
Linum perenne	sun	steppes, gravel
Lychnis viscaria	sun	sandy, xeric grasslands
Lythrum salicaria	sun - semi-shade	bogs and damp meadows, ditches
Macleaya cordata	sun - light shade	meadows, clearings
Matricaria caucasica	sun	mountainous meadows
Monarda-hybrids	sun - light shade	mountain slopes, alluvial forests
Nepeta faassenii	sun	rocky ground
Oenothera missouriensis	sun	rocky ground, edges of bushes
Oenothera tetragona	sun	edges of forests, borders of paths
Origanum vulgare and others	sun	poor grasslands, edges of bushes
Paeonia Lactiflora-hybrids	sun	meadows, light edges of forests
Paeonia officinalis	sun	mountain meadows, edges of forests
Papaver orientale	sun	grassy, rocky slopes
Phlomis russeliana	sun	clear cutting, edges of bushes
Phlox paniculata	sun	rich meadows, light alluvial soil
Phlox subulata	sun	gravelly surfaces, rocky-gravelly
Phuopsis stylosa	sun - semi-shade	light edges of forests, old dunes
Polemonium caeruleum	sun - semi-shade	moist meadows, forests on alluvial soil

Genus/species/variety	Light span	Preferred location
Potentilla aurea	sun	mountian meadow, dwarf shrub heaths
Primula elatior	sun - semi-shade	mountian meadow, alluvial forests
Prunella grandiflora	sun - semi-shade	semi-xeric grasslands, edges of forests
Pulsatilla vulgaris	sun	semi-xeric grasslands, gravel
Rudbeckia fulgida sullivantii	sun	moist edges of forests
Rudbeckia nitida	sun	moist and mountian meadow, cut lawns
Sagina subulata	sun - no direct sunlight	moist cracks in rocks
Salvia nemorosa	sun	semi-xeric grasslands, borders of paths
Sedum acre	sun - no direct sunlight	rocky strips, gravelly surfaces
Sedum album	sun	bedrock grasslands, cracks in rock
Sedum floriferum	sun - no direct sunlight	mountainous rocky ground
Sedum hybridum	sun - light shade	mountainous rocky ground
Sedum spectabile	sun	rocky ground, cracks in rock
Sedum spurium 'Album Superbum'	sun - semi-shade	mountainous bedrock meadows, edges of streams
Solidago caesia	sun	sunny pine forests, edges of forests
Stachys byzantina	sun	rocky ground, steppes
Symphytum azureum	sun	moist meadows
Thymus species	sun	sandy and poor grasslands
Trollius chinensis	sun - no direct sunlight	moist meadows and bogs
Verbascum olympicum	sun	rocky slopes, rocky steppes
Verbascum phoenicum	sun	rocky meadows
Veronica austriaca teucrium	sun - light shade	semi-xeric grasslands, edges of bushes
Veronica longifolia	sun - semi-shade	alluvial soil, swamps and bogs
Veronica spicata incana	sun - light shade	xeric grassland, gravelly meadows
<b>Grasses</b>		
Calamagrostis acutiflora	sun - semi-shade	clearings, moist meadows
Carex montana	sun - shade	chalk/poor grasslands, light forests
Cortaderia selloana	sun	river gravel, rocky meadows
Festuca cinerea	sun	strips of rock, semi-xeric grasslands
Festuca mairei	sun	mountian meadow, light edges of forests
Festuca ovina	sun - semi-shade	oak-pine forests, heaths
Helictotrichon sempervirens	sun	chalky, poor grasslands
Miscanthus giganteus	sun	moist meadows and swamps
Miscanthus sinensis	sun	moist meadows, alluvial soil
Molinia caerulea and others	sun - light shade	bogs and moist meadows
Panicum virgatum	sun	dry to moist meadows
Pennisetum alopecuroides	sun	meadows
Stipa pulcherrima	sun	rocky steppes, xeric grassland

continued on next page

## 19 - Sun-loving perennials

continued

Genus/species/variety	Light span	Preferred
<b>Aquatic plants</b>		
<i>Alisma plantago-aquatica</i>	sun - light shade	embankments, reed beds
<i>Butomus umbellatus</i>	sun	embankments, reed beds, ditches
<i>Caltha palustris</i>	sun - shade	embankments, swamps, forests on alluvial soil
<i>Iris pseudacorus</i>	sun - light shade	embankments, reed beds
<i>Nuphar lutea</i>	sun - semi-shade	ponds
<i>Nymphaea alba</i>	sun	ponds
<i>Phragmites australis</i>	sun - no direct sunlight	reed beds, alluvial soil
<i>Ranunculus lingua</i>	sun - no direct sunlight	embankments, ditches, reed beds
<i>Sagittaria sagittifolia</i>	sun - light shade	embankments, ditches, reed beds
<i>Scirpus tabernaemontanii</i>	sun	embankments, reed beds
<i>Stratiotes aloides</i>	sun	ponds
<i>Typha angustifolia</i>	sun	embankments, ditches, reed beds

## 20 - Semi-shade perennials

Here, species and varieties that need protection from direct sunlight or need semi-shady areas are listed. There are no clear distinctions between light shade and semi-shade. Some plants need exposure at the top without being directly hit by sun rays, such as in very light, large inner courts. Such areas have a high rate of light intensity. Light shade indicates constant change between sun spots and short shade times brought on by transparent branches. Semi-shade means: long periods of complete shade and short, but regularly occurring direct sunlight. The shade here is not dark as it is under conifers. Unlike with "no direct sunlight", shade changes in the course of the day.

Genus/species/variety	Light span	Preferred location
<i>Aconitum cammarum</i> 'Bicolor'	no direct sunlight - semi-shade	ravine and alluvial forests, mountainous meadows
<i>Aconitum carmichaelii</i> 'Arendsii'	no direct sunlight - semi-shade	moist forests
<i>Aconitum napellus</i>	no direct sunlight - semi-shade	mountainous alluvial forests, pasture bushes
<i>Ajuga reptans</i>	(sun) - semi-shade	moist, nutritious meadows
<i>Alchemilla mollis</i>	(sun) - semi-shade	river embankments, edges of forests
<i>Anemone hupehensis</i> 'Septembercharme'	no direct sunlight to light shade	ravine forests, shady bedrock
<i>Anemone Japonica</i> -hybrids	no direct sunlight to light shade	embankments, bushes
<i>Anemone nemorosa</i>	light shade	mixed deciduous forests
<i>Aquilegia alpina</i>	light shade - semi-shade	grassy slopes, light mountains forests
<i>Aquilegia</i> -hybrids	light shade - semi-shade	light forests
<i>Arabis procurrens</i> 'Glacier'	no direct sunlight - light shade	gravelly and grassy ground
<i>Aruncus aethusifolius</i>	no direct sunlight - light shade	mixed deciduous forests
<i>Aruncus dioicus</i>		beech-fir forests, hardwood meadows

Genus/species/variety	Light span	Preferred location
Aster divaricatus	(sun) - semi-shade	light fir-oak forests, clear cutting
Astilbe Arendsii-hybrids	light shade - semi-shade	moist forests
Astilbe chinensis pumila	light shade	alluvial and deciduous forests
Astilbe chinensis taquetii 'Purpurlanze'	no direct sunlight - semi-shade	moist forests
Bergenia species and varieties	no direct sunlight - semi-shade	cranberry-pine forests, birch-larch forests
Brunnera macrophylla	no direct sunlight - semi-shade	mountainous moist bushes, mixed conifer forests
Buglossoides purpureoaeurea	(sun) - semi-shade	down-oak forests, bushes
Campanula persicifolia varieties	light shade	oak-pine forests, embankments
Centaurea montana	no direct sunlight - semi-shade	mountainous mixed forests, edges of forests, mountainous meadows
Ceratostigma plumbaginoides	(sun) - semi-shade	gravel, dams
Chrysogonum virginianum	light shade - semi-shade	edges of forests, light forests
Cimicifuga species and varieties	light shade - shade	mixed deciduous forests with plentiful herbage
Convallaria majalis	light shade - semi-shade	mixed deciduous forests
Corydalis lutea	light shade - semi-shade	shady bedrock
Dicentra eximia	light shade - shade	mountainous mixed deciduous forests
Dicentra spectabilis	(sun) - light shade	pine-rhododendron forests
Digitalis grandiflora	(sun) - semi-shade	edges of forests, clearings
Digitalis purpurea varieties	no direct sunlight - semi-shade	edges of forests, clearings, heaths
Doronicum orientale	light shade - semi-shade	edges of forests and bushes, mixed forests with plentiful herbage
Epimedium perralderianum	light shade - shade	mountainous deciduous and mixed conifer forests
Epimedium rubrum 'Coccineum'	light shade - semi-shade	rocky forests
Epimedium versicolor 'Sulphureum'	light shade- shade	mixed forests rich with herbage
Eupatorium fistulosum varieties	(sun) - semi-shade	mixed forests with plentiful herbage, alluvial soil, moist meadows
Euphorbia griffithii 'Fireglow'	(sun) - light shade	light pine forests, clearings
Filipendula ulmaria	sun - semi-shade	moist meadows, alluvial soil, ditches
Fragaria vesca	(sun) - semi-shade	edges of forests, clearings
Galium odoratum	light shade - shade	mixed deciduous forests with plentiful herbage
Geranium endressii	(sun) - semi-shade	mountainous bushes, edges of forests
Geranium macrorrhizum varieties	(sun) - semi-shade	rocky forests, talus, scree
Geranium sanguineum	sun - semi-shade	xeric grassland communities, light forests
Geum species and varieties	(sun) - semi-shade	moist meadows, embankments, bushes
Helleborus foetidus	light shade - semi-shade	oak forests, beech bushes
Helleborus niger	light shade - semi-shade	beech forests, alpine pine forests
Hemerocallis-hybrids	sun - semi-shade	mountainous moist meadows, alluvial soil
Heuchera-hybrids	light shade - semi-shade	light forests, moist areas
Heuchera micrantha 'Palace Purple'	light shade - semi-shade	alluvial forests, conifer forests

*continued on next page*

## 20 - Semi-shade perennials

continued

Genus/species/variety	Light span	Preferred location
Hosta species and varieties	light shade - semi-shade	alder and pasture bushes, moist meadows, alluvial forests
Inula magnifica	sun - semi-shade	moist, mountainous birch forests
Lamium galeobdolon 'Florentinum'	no direct sunlight - shade	rich deciduous forests, hedges
Lamium maculatum	semi-shade - shade	moist deciduous forests, hedges
Ligularia species and varieties	light shade - semi-shade	mountainous alluvial forests, embankments
Lysimachia nummularia	light shade - semi-shade	alluvial forests, ditches, meadows
Lysimachia punctata	light shade - semi-shade	alluvial forests, moist meadows
Lythrum salicaria	sun - semi-shade	bogs and damp meadows, ditches
Omphalodes verna	light shade - shade	mixed beech forests, alluvial soil
Phuopsis stylosa	sun - semi-shade	light edges of forests, old dunes
Physalis alkekengi ranchetii	light shade - semi-shade	rocky forests, talus, scree
Polemonium caeruleum	(sun) - semi-shade	alluvial forests, moist meadows
Polygonatum multiflorum	light shade - shade	alluvial and mixed deciduous forests
Polygonum affine varieties	(sun) - semi-shade	moist grasslands and bedrock
Primula Bullesiana-hybrids	light shade - semi-shade	moist meadows, alluvial forests
Primula elatior	sun - semi-shade	mountian meadow, alluvial forests
Prunella grandiflora	sun - semi-shade	semi-xeric grasslands, edges of forests
Pulmonaria species and varieties	no direct sunlight - semi-shade	mixed deciduous forests
Rodgersia species	light shade - shade	alluvial soil, moist forests
Sedum spurium 'Album Superbum'	sun - semi-shade	mountainous bedrock meadows, edges of streams
Symphytum grandiflorum	no direct sunlight - shade	mountainous mixed beech forests
Tiarella cordifolia	light shade - shade	rich mountainous mixed forests
Veronica longifolia	(sun) - semi-shade	alluvial soil, swamps and bogs
Vinca species and varieties	(sun) - semi-shade	rocky forests, bushes
Waldsteinia geoides	light shade - shade	mixed deciduous forests, bushes
Waldsteinia ternata	light shade - shade	edges of bushes, moist meadows
<b>Grasses</b>		
Carex montana	sun - shade	chalk/poor grasslands, light forests
Carex morrowii 'Variegata'	no direct sunlight - semi-shade	rich mixed deciduous forests
Carex pendula	light shade - shade	ash and alder forests, banks of streams
Carex plantaginea	light shade - shade	moist forests
Deschampsia cespitosa	light shade - semi-shade	moist oak-beech forests
Festuca ovina	sun - semi-shade	oak-pine forests, heaths
Luzula sylvatica	light shade - shade	oak, beech, fir forests

## Semi-shade perennials - 20

*continued*

Genus/species/variety	Light span	Preferred location
<b>Ferns</b>		
Athyrium filix-femina	light shade - shade	fir-beech forests, alluvial plains
Dryopteris affinis	light shade - semi-shade	beech-fir forests, mountainous perennial ground
Dryopteris filix-mas	light shade - shade	rich deciduous and mixed conifer forests
Matteuccia struthiopteris	light shade - semi-shade	alluvial forests, embankments bushes
Osmunda regalis	light shade - semi-shade	birch-alder forests, ditches
Phyllitis scolopendrium	light shade - shade	ravine forests, moist bedrock
Polystichum setiferum and varieties	light shade - shade	mountainous mixed beech forests
<b>Aquatic plants</b>		
Caltha palustris	sun - shade	embankments, swamps, alluvial forests
Nuphar lutea	sun - semi-shade	ponds

## Shade-loving perennials - 21

Shade-loving perennials do not necessarily prefer deep shade far from the sun. Though there are a few genera that make do with 2% of the intensity of original sunlight, most shade-loving perennials prefer shade that is not too dark and is lightened at times by brief contact with wandering sun spots. Shade-loving perennials typically have light flower colours as the insects cannot recognise dark colours in the dark of the forest and leaves that remain pure green. This group of plants lacks protective mechanisms against evaporation such as white-tomentose-silvery leaves or blue wax coatings on the leaves.

Genus/species/variety	Light span	Preferred location
Aruncus dioicus	no direct sunlight - shade	beech-fir forests, hardwood meadows
Asarum europaeum	light shade - shade	mixed deciduous and conifer forests
Cimicifuga racemosa cordifolia	light shade - shade	mixed deciduous forests with plentiful herbage
Cimicifuga ramosa varieties	light shade - shade	moist beech-mixed meadows forests
Dicentra eximia	light shade - shade	mountainous mixed deciduous forests
Epimedium perralderianum	light shade - shade	mountain deciduous and mixed conifer forests
Epimedium versicolor 'Sulphureum'	light shade - shade	mixed forests rich with herbage
Epimedium youngianum	semi-shade - shade	mountainous forests with plenty of precipitation
Eupatorium fistulosum	(sun) - semi-shade - (shade)	alluvial forests, moist meadows
Galium odoratum	light shade - shade	mixed deciduous forests with plentiful herbage
Helleborus foetidus	semi-shade - (shade)	oak forests, beech bushes
Lamium galeobdolon 'Florentinum'	no direct sunlight - shade	rich deciduous forests, hedges
Lamium maculatum	semi-shade - shade	moist deciduous forests, hedges
Lysimachia punctata	semi-shade - (shade)	alluvial soil, moist bushes

*continued on next page*

## 21 - Shade-loving perennials

continued

Genus/species/variety	Light span	Preferred location
<i>Omphalodes verna</i>	light shade - shade	mixed beech forests, alluvial soil
<i>Polygonatum multiflorum</i>	light shade - shade	alluvial and mixed deciduous forests
<i>Rodgersia</i> species	light shade - shade	alluvial soil, moist forests
<i>Symphytum grandiflorum</i>	no direct sunlight - shade	mountainous mixed beech forests
<i>Tellima grandiflora</i>	semi-shade - shade	embankments, moist conifer forests
<i>Tiarella cordifolia</i>	light shade - shade	rich mountainous mixed forests
<i>Waldsteinia geoides</i>	light shade - shade	mixed deciduous forests, bushes
<i>Waldsteinia ternata</i>	light shade - shade	edges of bushes, moist meadows
<b>Grasses</b>		
<i>Carex montana</i>	sun - shade	chalk/poor grasslands, light forests
<i>Carex morrowii</i> 'Variegata'	semi-shade - (shade)	rich mixed deciduous forests
<i>Carex pendula</i>	light shade - shade	ash and alder forests, banks of streams
<i>Carex plantaginea</i>	light shade - shade	moist forests
<i>Deschampsia cespitosa</i>	semi-shade - (shade)	moist oak-beech forests
<i>Luzula sylvatica</i>	light shade - shade	beech and fir-spruce forests
<b>Ferns</b>		
<i>Athyrium filix-femina</i>	light shade - shade	fir-beech and alluvial forests
<i>Dryopteris affinis</i>	semi-shade - (shade)	beech-fir forests, mountainous perennial ground
<i>Dryopteris filix-mas</i>	light shade - shade	rich deciduous and mixed conifer forests
<i>Phyllitis scolopendrium</i>	light shade - shade	ravine forests, moist bedrock
<i>Polystichum setiferum</i>	light shade - shade	mountainous mixed beech forests
<b>Aquatic plants</b>		
<i>Caltha palustris</i>	(sun) - shade	alluvial forests, banks of streams, damp meadows

## 22 - Heath plants

The heath landscapes of northern and western Europe lack the variety of other vegetation units. Most species of trees, shrubs and perennials that occur here appear with a great number of individuals and few species. A few dominant varieties leave their mark impressively on the landscapes as we witness in the heaths of northern Germany, where *Calluna vulgaris*, *Juniperus communis* and others set the tone. In order to complement this monotonous, but attractive landscape with textures and structures, the heath perennials and grasses are ideal partners for and contrasts to these plants. All perennials that prefer sandy-humic, poor or moderately nutritious, acidic substrates should be short-listed. Such groupings cannot be planted on chalky, heavy soil. As all these plants generally need a lot of light, it is not always easy to find good partners for undergrowth.

Genus/species/variety	Needs light	Tolerates shade
<b>Flower perennials</b>		
Antennaria dioica 'Rubra' (i)	+	
Bergenia cordifolia (f)		+
Dianthus deltoides and varieties (i)	+	
Digitalis purpurea and varieties (i)		+
Phuopsis stylosa (f)	+	+
Potentilla aurea (i)	+	
Thymus serpyllum and varieties (i)	+	
<b>Grasses</b>		
Calamagrostis acutiflora 'Karl Foerster' (i)	+	
Festuca ovina (i)	+	+
Luzula sylvatica (i)		+
Molinia caerulea	+	+
<b>Ferns</b>		
Dryopteris filix-mas		+
Polystichum setiferum		+

i = indigenous species or variety  
f = foreign species or variety

Plants for heath gardens, see planning tips table no. 55

## Perennials for heavy soil - 23

It is not always easy to plant greenery on loam and clay. Numerous perennials suffer, especially in winter, from the stagnant dampness that regularly occurs. As most perennials are very sensitive to winter dampness, many plants, especially those from the south, can be ruled out. The perennials listed tolerate heavy soil, but that does not mean that heavy soil is optimal for them.

### Species/variety

Achillea ptarmica 'Boule de Neige'  
Aconitum species  
Ajuga reptans and varieties  
Anemone nemorosa  
Anemone sylvestris  
Aruncus dioicus  
Asarum europaeum  
Astilbe chinensis taquetii 'Purpurlanze'  
Brunnera macrophylla  
Centaurea montana  
Chrysanthemum serotinum  
Eupatorium fistulosum 'Atropurpureum'  
Filipendula ulmaria  
Geum coccineum 'Borisii'  
Hemerocallis-hybrids varieties  
Hosta species and varieties  
Inula magnifica  
Lamium galeobdolon 'Florentinum'  
Lamium maculatum varieties  
Ligularia species  
Lysimachia nummularia  
Lysimachia punctata

Lythrum salicaria  
Polemonium caeruleum  
Polygonum affine varieties  
Primula elatior  
Prunella grandiflora  
Rudbeckia nitida varieties  
Symphythum grandiflorum  
Tellima grandiflora  
Trollius chinensis varieties  
Waldsteinia geoides

### Grasses

Calamagrostis acutiflora 'Karl Foerster'  
Carex montana  
Carex morrowii 'Variegata'  
Carex pendula  
Deschampsia cespitosa  
Miscanthus species and varieties  
Molinia species

### Ferns

Matteuccia struthiopteris  
Osmunda regalis

## 24 - Perennials for damp areas and floods

In addition to the perennials that are truly for planting on the edge of water, many varieties like it moist and some even tolerate short floods. Such perennials are the best transitional plants between genuine embankment vegetation and the perennials that prefer "fresh soil".

Genus/species/variety	Tolerates dampness	Tolerates floods
Achillea ptarmica 'Boule de Neige'	+	
Anemone nemorosa	+	+
Aster novi-belgii	+	
Astilbe chinensis taquetii 'Purpurlanze'	+	
Astrantia major	+	
Brunnera macrophylla	+	
Chrysanthemum serotinum (= Leucanthem.)	+	+
Chrysogonum virginianum	+	
Eupatorium fistulosum 'Atropurpureum'	+	+
Filipendula ulmaria	+	+
Hemerocallis-hybrids	+	
Inula magnifica	+	
Iris sibirica varieties	+	
Ligularia species	+	
Lysimachia nummularia	+	
Lysimachia punctata	+	
Lythrum salicaria	+	+
Polemonium caeruleum	+	
Polygonum affine varieties	+	
Primula Bullesiana-hybrids	+	
Primula elatior	+	
Sedum spurium in green leaf varieties	+	+
Tellima grandiflora	+	+
Trollius chinensis 'Golden Queen'	+	
Veronica longifolia	+	
<b>Grasses</b>		
Carex pendula	+	+
Deschampsia cespitosa	+	+
Luzula sylvatica	+	+
Miscanthus giganteus	+	+
Molinia caerulea	+	
<b>Ferns</b>		
Athyrium filix-femina	+	
Matteuccia struthiopteris	+	
Osmunda regalis	+	+
<b>Swamp and aquatic plants</b>		
Alisma plantago-aquatica	+	+
Butomus umbellatus		+
Caltha palustris	+	+
Iris pseudacorus	+	+
Phragmites australis	+	+
Scirpus tabernaemontani 'Zebrinus'	+	+
Typha angustifolia	+	+

## Indigenous wild perennials - 25

Like the central-European wild plants, indigenous wild perennials usually aren't equally spread across the whole region, but rather occur in limited areas. Some are considered local specialities and only occur in special niche situations. Before they are planted in open landscapes, the conditions at the site should be analysed lest the flora be adulterated.

### Flower perennials

Aconitum napellus  
Ajuga reptans  
Anemone nemorosa  
Anemone sylvestris  
Antennaria dioica 'Rubra'  
Aquilegia alpina  
Aruncus dioicus  
Asarum europaeum  
Astrantia major  
Buglossoides purpureocaerulea  
(= Lithospermum purpureocaeruleum)  
Calamintha nepeta nepeta  
Centaurea montana  
Convallaria majalis  
Corydalis lutea (eingebürgert)  
Dianthus deltoides  
Digitalis grandiflora  
Eryngium planum  
Euphorbia polychroma  
Filipendula ulmaria  
Fragaria vesca  
Galium odoratum  
Geranium sanguineum  
Helleborus foetidus  
Helleborus niger  
Inula ensifolia  
Lamium galeobdolon 'Florentinum'  
(= L. argentatum)  
Lamium maculatum  
Lysimachia nummularia  
Lysimachia punctata  
Lythrum salicaria  
Polemonium caeruleum  
Polygonatum multiflorum  
Potentilla aurea  
Primula elatior  
Prunella grandiflora  
Pulsatilla vulgaris  
Sedum acre  
Sedum album  
Veronica longifolia  
Veronica austriaca teucrium

### Grasses

Carex montana  
Carex pendula  
Deschampsia cespitosa  
Festuca cinerea  
Festuca ovina  
Luzula sylvatica  
Molinia caerulea  
Stipa pulcherrima

### Aquatic plants

Alisma plantago-aquatica  
Butomus umbellatus  
Caltha palustris  
Iris pseudacorus  
Nuphar lutea  
Nymphaea alba  
Phragmites australis  
Ranunculus lingua  
Sagittaria sagittifolia  
Stratiotes aloides  
Typha angustifolia

### Ferns

Athyrium filix-femina  
Dryopteris affinis  
Dryopteris filix-mas  
Matteuccia struthiopteris  
Osmunda regalis  
Phyllitis scolopendrium  
Polystichum setiferum

The colour selections of wild varieties that can also occur in the wild are listed.

## 26 - Naturalised and foreign wild perennials

Wild perennials from other countries can be used meaningfully in wild gardens and parks that are near but not identical to natural conditions where the situation allows. The use of plants from other continents provides exciting new aspects. The mixture of indigenous and foreign species or especially exotic looking species makes for extraordinarily luxurious, exotic, attractive plant combinations. The use of foreign species in open landscapes is forbidden by law for conservation reasons and should be avoided in order to prevent the adulteration of flora.

Genus/species/variety	Origins
<b>Flower perennials</b>	
<i>Acaena buchananii</i>	New Zealand
<i>Acaena microphylla</i>	New Zealand
<i>Alchemilla mollis</i>	Caucasus, Carpathians
<i>Artemisia stelleriana</i>	eastern Asia
<i>Aruncus aethusifolius</i>	Japan, Korea
<i>Aster divaricatus</i>	eastern North America
<i>Astilbe chinensis pumila</i>	western China
<i>Bergenia cordifolia</i>	Siberia
<i>Brunnera macrophylla</i>	Caucasus
<i>Centranthus ruber</i>	Mediterranean area
<i>Cerastium tomentosum</i>	southern Italy
<i>Ceratostigma plumbaginoides</i>	western China
<i>Chrysanthemum serotimum</i> (= <i>Leucanthemella</i> s.)	south-eastern Europe
<i>Chrysogonum virginianum</i>	eastern North America
<i>Cimicifuga racemosa cordifolia</i>	eastern North America
<i>Coreopsis verticillata</i>	eastern North America
<i>Corydalis lutea</i>	southern Europe
<i>Delphinium grandiflorum</i>	northern China, eastern Siberia
<i>Dicentra eximia</i>	eastern North America
<i>Dicentra spectabilis</i>	eastern Asia
<i>Doronicum orientale</i>	south-eastern Europe
<i>Echinacea purpurea</i>	eastern North America
<i>Echinops bannaticus</i>	south-eastern Europe
<i>Eupatorium fistulosum</i>	eastern North America
<i>Euphorbia griffithii</i>	Himalayas
<i>Euphorbia myrsinites</i>	southern Europe, Asia Minor
<i>Geranium clarkei</i>	Himalayas
<i>Geranium endressii</i>	Pyrenees
<i>Geranium macrorrhizum</i>	southern Europe
<i>Geranium renardii</i>	Caucasus
<i>Hosta lancifolia</i>	Japan

Genus/species/variety	Origins
<i>Hosta sieboldiana</i>	Japan
<i>Hosta ventricosa</i>	eastern Asia
<i>Hypericum polyphyllum</i>	southern Europe
<i>Inula magnifica</i>	Caucasus
<i>Lathyrus latifolius</i>	Mediterranean area
<i>Lavandula angustifolia</i>	Mediterranean area
<i>Ligularia dentata</i>	eastern Asia
<i>Ligularia przewalskii</i>	northern China
<i>Lysimachia punctata</i>	south-western Europe, western Asia
<i>Macleaya cordata</i>	eastern Asia
<i>Matricaria caucasica</i>	south-eastern Europe, western Asia
<i>Oenothera missouriensis</i>	south-western North America
<i>Oenothera tetragona</i>	eastern North America
<i>Omphalodes verna</i>	southern Europe
<i>Phlomis russeliana</i>	south-eastern Europe, western Asia
<i>Phuopsis stylosa</i>	south-eastern Europe, western Asia
<i>Physalis alkekengi franchetii</i>	eastern Asia
<i>Pulmonaria rubra</i>	south-eastern Europe
<i>Rodgersia aesculifolia</i>	western China
<i>Rodgersia pinnata</i>	western China
<i>Sagina subulata</i>	south-western Europe, North America
<i>Solidago caesia</i>	eastern North America
<i>Symphytum azureum</i>	Caucasus
<i>Symphytum grandiflorum</i>	Caucasus
<i>Tellima grandiflora</i>	western North America
<i>Tiarella cordifolia</i>	eastern North America
<i>Verbascum olympicum</i>	south-eastern Europe
<i>Veronica spicata incana</i>	eastern Europe, Siberia
<i>Waldsteinia geoides</i>	south-eastern Europe
<i>Waldsteinia ternata</i>	eastern Europe, eastern Asia
<b>Grasses</b>	
<i>Carex plantaginea</i>	North America
<i>Cortaderia selloana</i>	South America
<i>Festuca mairei</i>	northern Africa
<i>Helictotrichon sempervirens</i>	Switzerland, France
<i>Miscanthus giganteus</i>	eastern Asia
<i>Panicum virgatum</i>	North America

## 27 - Farm garden

Farm gardens have always been more than merely decorative; they have always contained a combination of decorative plants, cut plants, spices, vegetables, and medicinal plants. The gardens usually were arranged geometrically like monastic gardens. Border plants were created from plants tolerant of cutting like *Buxus* and subshrubs like *Lavandula* or, less often, from perennials. The indigenous and the exotic were casually juxtaposed. Colourful, densely double perennials were especially popular. Regional preferences were once easier to distinguish than nowadays. The various needs of the plants depending on location were seldom attended to, and when they were, it was usually “compensated for” with an extra portion of manure.

As farm gardens were positioned to have full sun, there was usually only space for a lightly sunny or semi-shady bed under apple or pear trees.

Species/variety	Main use
<b>Sunny areas</b>	
<i>Aconitum cammarum</i> 'Bicolor'	medicine, decoration
<i>Aconitum napellus</i>	medicine, decoration
<i>Aquilegia</i> -hybrids	decoration, cutting
<i>Aster novi-belgii</i> varieties	decoration
<i>Campanula</i> species	decoration, some vegetables
<i>Chrysanthemum leucanthemum</i>	decoration
<i>Chrysanthemum maximum</i>	decoration
<i>Dianthus plumarius</i> varieties	scent, cutting
<i>Dicentra spectabilis</i>	decoration, symbol plant
<i>Echinops bannaticus</i>	decoration
<i>Fragaria vesca</i>	fruits
<i>Gypsophila paniculata</i>	cutting
<i>Helleborus niger</i>	decoration, medicine
<i>Humulus lupulus</i>	medicine
<i>Iberis sempervirens</i>	decoration, borders
<i>Iris sibirica</i> varieties	decoration
<i>Iris-Barbata-Elatior</i>	decoration, cutting
<i>Lavandula angustifolia</i>	cut borders, scent
<i>Lupinus-Polyphyllus</i> -hybrids	decoration, cutting
<i>Lychnis viscaria</i> 'Plena'	decoration
<i>Monarda</i> -hybrids	decoration, scent
<i>Nepeta faassenii</i>	borders, decoration
<i>Origanum vulgare</i> varieties	spice
<i>Paeonia officinalis</i> 'Rubra Plena'	medicine, cutting
<i>Papaver orientale</i>	decoration
<i>Phlox paniculata</i>	decoration
<i>Physalis alkekengi franchetii</i>	decoration
<i>Primula elatior</i>	decoration
<i>Salvia nemorosa</i> varieties	decoration, medicine
<i>Sedum spectabile</i>	medicine, decoration

Species/variety	Main use
Sedum spurium 'Album Superbum'	borders
Stachys byzantina	borders, decoration
Thymus species and varieties	spice, scent
Vinca minor	medicine, decoration
<b>Lightly shady to semi-shady</b>	
Aconitum napellus	medicine, decoration
Aruncus dioicus	decoration
Bergenia cordifolia	borders
Centaurea montana varieties	decoration
Convallaria majalis	scent, cutting, medicine
Dicentra spectabilis	decoration, symbol plant
Digitalis purpurea	medicine
Doronicum species	cutting
Dryopteris filix-mas	medicine
Galium odoratum	scent, medicine
Hosta crispula and others	borders, decoration
Vinca minor	decoration, medicine
<b>Plants from the farm garden</b>	
Buxus sempervirens varieties	borders, topiary
Cornus mas	fruits
Corylus avellana	fruits
Hedera helix	decoration
Laburnum species	decoration
Ligustrum vulgare	border hedge
Lonicera caprifolium	scent, twined pergola
Lonicera periclymenum	scent, twined pergola
Mespilus germanica	fruits
Philadelphus coronarius	decoration
Rosa - old, double varieties	decoration, scent
Rosa - wild varieties	rose hips
Sambucus nigra	fruits, medicine
Syringa vulgaris	decoration, cutting
Taxus baccata	borders, topiary
Viburnum opulus 'Sterile'	decoration
fruit plants of all kinds	fruits

## 28 - Extensive and simple, intensive roof greenery

There is no clear distinction between extensive and simple, intensive roof greenery. The depth for the roots determines which perennials are possible. The more shallow the soil, the more limited the palette of possible, robust perennials. The deeper the substrate, the larger the competition will be between the plants. With each improvement of the substrate, the weakly competitive species will be increasingly overgrown. The more shallow the soil, the more the demanding varieties will wither or dry out.

Species/variety	Extensive	Simple intensive
Achillea tomentosa		+
Alyssum montanum		+
Alyssum saxatile		+
Anemone sylvestris		+
Arabis caucasica		+
Artemisia schmidtiana 'Nana'		+
Calamintha nepeta	+	+
Campanula glomerata		+
Centranthus ruber varieties		+
Cerastium tomentosum 'Silberteppich'	+	
Dianthus deltooides varieties	+	
Dianthus plumarius varieties		+
Geranium cantabrigiense 'Biokovo' among others	+	+
Geranium macrorrhizum varieties		+
Geranium renardii		+
Geranium sanguineum	+	+
Gypsophila repens		+
Hypericum polyphyllum	+	
Inula ensifolia		+
Iris-Barbata-Nana varieties	+	
Linum perenne	+	+
Lychnis viscaria		+
Nepeta faassenii		+
Origanum vulgare varieties	+	+
Prunella grandiflora		+
Pulsatilla vulgaris		+
Sedum acre	+	
Sedum album 'Coral Carpet'	+	
Sedum floriferum 'Weihenstephaner Gold'	+	
Sedum telphium 'Herbstfreude'		+
Sedum hybridum 'Immergrünchen'	+	
Sedum spectabile i.S.		+
Sedum spurium 'Album Superbum'	+	
Stachys byzantina 'Silver Carpet'	+	+
Thymus serpyllum varieties	+	
Veronica spicata		+

extensive: soil layer between 6-10 cm                      simple intensive: soil layer between (8) 10-15 cm

## Extensive and simple, intensive roof greenery - 28

Species/variety	Extensive	Simple intensive
<b>Grasses</b>		
Carex montana	+	
Festuca cinerea	+	
Festuca ovina	+	
Helictotrichon sempervirens		+
Stipa pulcherrima		+

extensive: soil layer between 6-10 cm                      simple intensive: soil layer between (8) 10-15 cm

## Medicinal plants - 29

Knowledge about the effects of medicinal plants is very old. Much of the knowledge our ancestors collected has been scientifically confirmed in recent years. Other effects are best seen as beliefs and superstition. As it is forbidden by national conservation laws to collect medicinal plants in the wild, it is recommended that they be planted in gardens. Medicinal plants should be used with caution; for small wounds, self-treatment is justified, but a doctor must be visited for serious illnesses and injuries. Numerous medicinal plants are also poisonous, can lead to allergies, or have other side effects. Inform yourself thoroughly before any applications.

Species/variety	Plant parts used	Medicinal effects
Achillea millefolium	dried leaves, flowers	intestinal and stomach pains, menstrual pains, wounds
Aconitum species	rhizome (extremely poisonous)	colds, pain-killer (caution)
Alchemilla mollis and others	dried leaves	intestinal and stomach pains, menstrual pains
Antennaria dioica	dried flowers	intestinal and stomach pains
Asarum europaeum	roots	asthma, intestinal and stomach pains
Centranthus ruber	roots	sleep disturbances
Cimicifuga racemosa	roots	menstrual pains, gout, rheumatism, asthma
Convallaria majalis	dried leaves, flowers (poisonous)	heart disease (caution)
Digitalis purpurea and others	dried leaves (poisonous)	heart pain (caution)
Dryopteris filix-mas	roots (poisonous)	vermicide, (caution), phlebitis
Echinacea purpurea	fresh leaves, roots	colds, anti-inflammatory
Eryngium planum	fresh herbage, roots	whooping cough, antispasmodic
Filipendula ulmaria	dried flowers, roots	fever, gout, rheumatism
Fragaria vesca	dried leaves, fruits	cleans blood
Galium odoratum	dried young leaves	sleep disturbances, antispasmodic
Helleborus niger	roots (poisonous)	laxative, headaches
Lysimachia nummularia	fresh shoots	heals wounds, clots blood
Lythrum salicaria	fresh or dried leaves	clots blood, heals wounds, digestive disturbances
Monarda-hybrids	dried leaves, flowers	tranquilising, heals wounds

*continued on next page*

Species/variety	Plant parts used	Medicinal effects
Oreginum vulgare and others	dried leaves	appetite stimulant, colds
Paeonia officinalis	seeds, roots	gout, rheumatism
Phyllitis scolopendrium	dried leaves	bronchitis, liver ailments
Physalis alkekengi	mature fruits	bladder ailments, gout, rheumatism
Primula elatior	dried roots, flowers	colds, bladder ailments
Prunella grandiflora	dried leaves	eye inflammation, heals wounds
Pulmonaria officinalis	dried leaves	colds
Sedum acre	fresh leaves	wounds, burns
Symphytum species	roots	bruises, broken bones
Thymus species	fresh or dried leaves	colds, gout, rheumatism
Vinca minor	flowering shoots	skin cancer, colds
<b>Woody plants</b>		
Abies alba	needles, young twigs	colds, rheumatism
Aesculus hippocastanum	skinned fruits, flowers	phlebitis, intestinal and stomach pains
Alnus species	young bark	sore throats
Arctostaphylos uva-ursi	dried leaves	bladder ailments
Berberis vulgaris	root bark	menstrual pains, liver and gall ailments
Betula pendula and others	dried young leaves	gout, rheumatism, nephritis
Calluna vulgaris	dried flowering twigs	sedative, gout, rheumatism
Castanea sativa	dried leaves	whooping cough
Crataegus laevigata	dried leaves, flowers, fruits	lowers blood pressure, heart disease
Crataegus monogyna	as above	
Cytisus scoparius	flowers, dried herbage (poisonous)	heart disease, cleans blood
Fraxinus excelsior	dried leaves, young bark	gout, rheumatism, bladder ailments; ulcers
Hamamelis virginiana	dried leaves, bark	clots blood, phlebitis
Hedera helix	young sprouts and leaves	whooping cough, rheumatism
Juglans regia	fresh or dried leaves, green fruit skin	anti-inflammatory, intestinal and stomach pains, gout
Juniperus communis	dried berries, twig tips	appetite stimulant, rheumatism; rheumatism, gout
Larix decidua	resin	abscesses, rheumatism
Lavandula angustifolia	flower buds	sleep disturbances, migraines
Picea abies	needles	colds
Pinus mugo and others	needles, young twigs tips	bronchitis, rheumatism
Populus nigra	dried spring buds	rheumatism, gout, bronchitis
Populus tremula	young bark and leaves	rheumatism, gout, bladder ailments
Prunus padus	fresh bark	gout, rheumatism, fever reduction
Prunus spinosa	dried flowers, fruits	laxative, bladder ailments
Rhamnus catharticus	fruits, young bark	laxative
Rhamnus frangula	dried bark (poisonous)	laxative
Ribes nigrum	dried leaves, fruits	gout, rheumatism, whooping cough

Species/variety	Plant parts used	Medical effects
Ribes nigrum	dried leaves, fruits	gout, rheumatism, whooping cough
Robinia pseudoacacia	dried bark (poisonous)	migraines, facial neuralgia
Rosa canina and others	rose hips without seeds	kidney and bladder ailments, exhaustion
Rubus fruticosus	dried leaves	colds,
Salix species	dried bark	pain-killer ("Aspirin")
Sambucus nigra	all parts, fresh or dry	colds, sudorific
Sorbus aucuparia	berries, fresh or dry, flowers	menstrual pains, rheumatism, colds
Tilia species	dried flowers	colds, intestinal and stomach pains
Vaccinium vitis-idaea	dried leaves	bladder ailments
Viburnum opulus	dried bark	menstrual pains, antispasmodic

## Edible perennials - 30

The perennials presented here should not be seen as competition for vegetables and lettuce; rather, the readers are encouraged to try something unusual, to give their own cooking an exotic taste and expand on the selection of spices. Some of these plants used to grow in kitchen gardens, though they are only known as decorative plants today.

Species/variety	Usable plant parts	Dish/drink	Taste
Alchemilla mollis	young leaves - fresh - dried	spices, salads, vegetables spice	bitter-sweet-spicy, older plants withering
Anchusa azurea and others	young leaves flowers	vegetables, colourful deco- ration in salads, food colouring	like borscht, like cucumbers
Butomus umbellatus	roots, rhizomes	vegetables roasted, ground-flour	mild
Calamintha nepeta	young leaves - dried	herbal tea, tea, spice	like peppermint
Campanula persicifolia	roots	cooked as a salad et al.	sweetish-mild
Centranthus ruber	young leaves	salad, vegetables	like lamb's lettuce
Chrysanthemum leucan- themum (=Leucanthemum v.)	young leaves, sprouts before flowers	salad, vegetables	tangy
Chrysanthemum maximum	petals, inflorescences	salad, also fried	more for decoration, flowery-mild
Coreopsis grandiflora	petals	gives food a yellow tinge	tasteless
Dianthus plumarius	upper parts of petals (bitter at the base)	salad, marmalade, vinegar, liqueur, candied	fragrant like flowers
Eryngium planum	sprouts before flowering, roots	salad vegetables	sweetish-spicy hot

*continued on next page*

## 30 - Edible perennials

continued

Species/variety	Usable plant parts	Dish/drink	Taste
Filipendula ulmaria	young leaves - dried	additive in herbal beer, wine, herbal tea, soup spice, in marmalade	aromatic somewhat reminiscent of "chewing gum"
Fragaria vesca	fruits young leaves dry	fruit, marmalade, herbal tea	sweet, intense aroma aromatic-bitter
Galium odoratum	leaves, sprouts before flowering in small doses	tea, punch, potpourri	pleasant scent, aromatic, most aromatic when slightly dry
Hemerocallis hybrids	young leaves, flower buds	vegetables soup spice	peppery hot like horseradish
Hosta species	youngest leaves in spring	salad, vegetables	neutral
Lamium maculatum	young leaves, sprouts before flowers	vegetables	like spinach
Lavandula angustifolia and others	youngest leaves - dried, flowers - dried	spice spice, potpourri tea or tea additive, vinegar, marmalade additive, potpourri	bitter-spicy, fragrant-aromatic
Lythrum salicaria	young leaves, sprouts before flowers, flowers	vegetables, tea, sweets-decoration	mild-tart
Monarda hybrids	young leaves before flowering - dried, flowers	salad, spice herbal tea, marmalade, exotic drinks, tea, salad, spices potpourri	like peppermint to balm, spicy-aromatic
Origanum vulgare 'Compactum'	young leaves, leaves dried	spice	spicy-aromatic
Prunella grandiflora	young leaves, sprouts before flowers	soup, salads, vegetables	mild-neutral
Pulmonaria angustifolia	fresh leaves before flowering	soup, salads, vegetables	slightly spicy
Pulmonaria officinalis	as above		
Sagittaria sagittifolia	root tubers - dried	vegetables ground as flour	like peas or nuts (if the ducks leave any)
Sedum acre	young leaves young (small) shoot pieces	spicy, only in small amounts!	peppery hot
Sedum reflexum	young leaves	soups, salads	sour
Sedum telephium	young leaves	soups, salads	tangy
Symphytum grandiflorum	young spring leaves, young stems, whole flowers	salad, vegetables fried, salad (decoration) fried	like spinach, spicy hot, flowers-spicy
All species of Thymus	leaves, stems - dried	spice, potpourri	aromatic
Typha angustifolia	young sprouts, flower tips before flowering, roots dried	salad, vegetables, vegetables flour	tangy, sweetish-spicy hot

Plants that have been used for ages in food but could lead to allergies, such as Achillea millefolium, have been left out of the list.

Starting in July or August, certain perennials are frequented by butterflies, especially on hot-humid days. The number of butterflies changes from year to year, depending on the strength of the previous winter. The following are often found on the perennials listed below: Red admiral, painted lady (thistle butterfly), small tortoiseshell, peacock butterfly, and sillagowhitings.

Achillea millefolium and hybrids  
Aster species and varieties  
Centranthus ruber 'Coccineus'  
Cimicifuga species and varieties  
Dianthus species and varieties  
Echinacea purpurea  
Echinops species and varieties  
Erigeron hybrids  
Helenium hybrids  
Helianthus decapetalus 'Capenoch Star'  
Inula species  
Lavandula angustifolia varieties  
Lythrum salicaria  
Monarda varieties  
Nepeta x faassenii 'Six Hill Giant'  
Origanum species and varieties  
Phlox paniculata varieties  
Prunella grandiflora  
Salvia species and varieties  
Sedum telephium 'Herbstfreude'