



# 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 **solitaire** 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	Special characteristics
Achillea hybrids	100 - 120 cm	rigid peduncles, syncarpic attractive far into winter
Aconitum carmichaelii 'Arendsii'	110 - 130 cm	autumn flowers
Aconogonon speciosum 'Johanniswolke'	200 - 250 cm	long flowering period
Agastache Rugosa hybrids	70 - 90 cm	long flowering, bee pasture
Allium afghanense 'Purple Sensation'	80 - 90 cm	stable, perennial, bee magnet
Aruncus dioicus	120 - 150 (200) cm	flowers, autumn colours
Aster novae-angliae a. o.	130 - 150 (180) cm	later flowers
Aster novi-belgii a. o.	120 - 140 cm	late, persistent flowers
Chelone obliqua	60 - 80 (100) cm	long flowering
Cimicifuga racemosa cordifolia	180 - 250 cm	towering inflorescences
Cimicifuga simplex 'Brunette'	140 - 200 cm	black-red-violet leaves, insect magnet
Delphinium elatum	150 - 180 cm	flowers twice, needs cutting
Echinops ritro	80 - 100 cm	attractive seed stand, insect pasture
Eupatorium rugosum 'Chocolate'	80 - 100 cm	ornamental foliage, insect pasture
Helenium cultorum 'Kugelsonne'	120 - 150 cm	many flowers
Inula magnifica	150 - 200 (250) cm	giant but doesn't need support
Ligularia przewalskii	120 - 150 (180) cm	many flowers
Macleaya cordata	180 - 200 (300) cm	rampant, only stopped with rhizome barrier
Rodgersia species	110 - 150 cm	long-lived, decorative leaves
Rudbeckia nitida 'Herbstsonne'	180 - 220 cm	late flowers
Verbascum olympicum	180 - 220 cm	short-lived, replant!

## Grasses

Bamboo in species and varieties	200 - 400 cm	evergreen, put up rhizome barrier
Calamagrostis acutiflora 'Karl Foerster'	120 - 170 cm	turns green early, spikes into autumn
Carex pendula	120 - 150 cm	evergreen to nearly-evergreen
Cortaderia selliana	100 - 250 (500) cm	late flowers, evergreen
Miscanthus giganteus	250 - 350 cm	dense leave clusters, hardly flowering
Miscanthus sinensis 'Gracillimus'	140 - 170 cm	elegantly liltng, dense
Miscanthus sinensis 'Silberfeder'	150 - 220 cm	many flowers

Genus/species/variety	Size	Special characteristics
Molinia arundinacea 'Karl Foerster'	180 - 240 cm	transparent, attractive spikes
Molinia arundinacea 'Transparent'	150 - 180 cm	elegant, golden yellow in autumn
Panicum virgatum 'Heavy Metal'	up to 130 cm	shimmering stalks, blue-green
Pennisetum alopecuroides 'Compressum'	up to 110 cm	wide spreading horsts
Stipa gigantea	160 - 180 cm	translucent stalks, very stable

## Ferns

Dryopteris affinis	100 - 160	needs wind protection!
Osmunda regalis	50 - 150 (200)	moist to damp areas

# 2 Leader perennials

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 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	Special characteristics
Achillea filipendulina varieties	70 - 120 cm	flowers long
Aconitum carmichaelii 'Arendsii'	110 - 130 cm	late flowers
Aconitum napellus and others	80 - 120 (150) cm	flowers in July, then neutral
Anemone japonica	60 - 120 cm	late flowers
Aruncus dioicus	120 - 150 (200) cm	attractive into winter
Aster divaricatus 'Tradescant'	up to 60 cm	compact clusters, clouds of flowers
Aster linosyris	50 - 60 cm	robust structural plant
Aster novae-angliae varieties	100 - 150 (180) cm	many flowers
Aster novi-belgii	80 - 140 cm	plentiful, long-lasting flowers
Aster sedifolius 'Nanus'	30 - 40 cm	rich flowering, bee pasture
Astilbe arendsii	70 - 100 cm	beautiful until autumn
Astrantia major	40 - 60 cm	reblooming in September
Bistorta officinalis 'Superbum'	60 - 80 cm	not rampant, stable
Cimicifuga species and varieties	150 - 200 (250) cm	late flowers





Genus/species/variety	Size	Special characteristics
Delphinium hybrids	70 - 200 cm	second flowers after cutting
Echinacea pallida	70 - 80 cm	upright, butterfly magnet
Echinops bannaticus 'Blue Glow'	100 - 120 cm	exotic
Helenium cultorum	70 - 150 cm	overflowing with flowers
Hemerocallis cultorum	70 - 90 cm	early shots, autumn flowers
Hosta hybrid 'Royal Standard'	50 - 100 cm	early shoots, autumn colours
Hosta hybrids	50 - 80 cm	broad clump, autumn colours
Liatris spicata varieties	30 - 90 cm	flowers in the summer
Ligularia species and varieties	60 - 150 cm	decorative flowers and leaves
Lythrum salicaria	80 - 150 cm	endless propagation by seed!
Malva moschata	60 - 70 cm	short-lived, roaming with seeds
Monarda fistulosa	80 - 150 cm	flowers long
Paeonia lactiflora	80 - 100 (120) cm	plentiful flowers, autumn colours
Phlox paniculata varieties	70 - 140 cm	overflowing with flowers
Rodgersia species	60 - 120 cm	persistent, decorative leaves
Rudbeckia fulgida deamii	80 - 100 cm	dense clusters, all flowers in one level
Salvia species and varieties	(30)40 - 80 cm	aromatic, insect magnet
Sedum telephium 'Herbstfreude'	50 - 70 cm	for low groups, otherwise as company
Solidago sphacelata 'Golden Fleece'	40 - 60 cm	less rampant than known for the species
Verbena bonariensis 'Lollipop'®	40 - 60 cm	more compact as known for the species

## Grasses

Calamagrostis acutiflora 'Karl Foerster'	120 - 170 cm	turns green early, attractive into autumn
Calamagrostis arundinacea brachytricha	40 - 100 cm	attractive into autumn
Carex pendula	80 - 120 cm	evergreen to nearly-evergreen
Deschampsia cespitosa varieties	up to 100 cm	fine panicles
Festuca cinerea 'Elijah Blue'	40 - 60 cm	intense steel-blue
Festuca mairei	50 - 100 cm	attractive into autumn
Helictotrichon sempervirens	60 - 100 (150) cm	evergreen
Miscanthus sinensis 'Gracillimus'	140 - 170 cm	compact
Molinia arundinacea 'Karl Foerster'	70 - 180 (240) cm	transparent, only low partners
Molinia caerulea	50 - 120 cm	choose only low partners
Panicum virgatum 'Rehbraun'	60 - 120 cm	autumn colours
Pennisetum alopecuroides varieties	up to 140 cm	bottle brush-shaped panicles
Pennisetum orientale	60 - 70 cm	dark pink panicles

## Ferns

Athyrium filix - femina	50 - 100 cm	early shoots, autumn colours
Dryopteris affinis	100 - 160 cm	winter green, need wind protection!
Dryopteris filix - mas	50 - 120 cm	early shoots
Polystichum aculeatum	60 - 80 cm	ornamental leaves
Polystichum setiferum	30 - 80 cm	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	Special characteristics
Achillea Filipendula hybrids and varieties	70 - 120 cm	long into autumn
Achillea millefolium	30 - 70 cm	inconspicuous from August on
Achillea ptarmica 'Boule de Neige'	50 - 70 cm	long-lived, spreading afar
Aconitum species and varieties	80 - 100 cm	long-lived, somewhat lateflowers
Alchemilla species	30 - 50 cm	long-lived
Anchusa azurea 'Dropmore'	80 - 100 cm	inconspicuous or withering from July on
Anemone hupehensis varieties	50 - 70 cm	long-lived, broadening
Anemone japonica hybrids	60 - 100 cm	long-lived, late flowers
Aquilegia hybrids	50 - 60 cm	usually withering in June
Aquilegia vulgaris	30 - 70 cm	early feeding
Aruncus aethusifolius	25 - 30 cm	long-lived, autumn colours
Aster amellus	40 - 60 cm	long-lived
Aster divaricatus	50 - 60 cm	long-lived, large groups
Aster dumosus	30 - 50 cm	long-lived, covering large surfaces
Aster novi-belgii	80 - 120 (140) cm	long-lived, numerous flowers in autumn
Astilbe arendsii hybrids	50 - 100 cm	long-lived, autumn colours
Astrantia major varieties	50 - 70 cm	gradually broad
Bergenia cordifolia	30 - 60 cm	evergreen
Brunnera macrophylla	30 - 50 cm	very early shoots
Campanula latifolia macrantha	100 - 120 cm	on dry areas withering early
Campanula persicifolia varieties	60 - 80 cm	inconspicuous from August on
Centranthus ruber varieties	50 - 70 cm	long-lived, long flowering
Coreopsis grandiflora varieties	30 - 80 cm	long-lived
Delphinium belladonna	70 - 130 cm	secondflowers after cutting
Dicentra spectabilis + 'Alba'	60 - 90 cm	wither from June on
Digitalis grandiflora	50 - 100 cm	long-lived
Digitalis purpurea 'Gloxiniaeflora'	120 - 150 cm	loose appearance with peragation by seed
Dobernicum orientale 'Magnificum'	40 - 60 cm	wither from June on
Echinacea purpurea	70 - 90 cm	long-lived
Echinops bannaticus 'Blue Glow'	100 - 120 cm	withering from September on
Euphorbia amygdaloides 'Purpurea'®	30 - 50 cm	better in wild beds ornamental leaves, wintgreen





### 3 Companion perennials

Genus/species/variety	Size	Special characteristics	Genus/species/variety	Size	Special characteristics
Euphorbia polychroma	30 - 50 cm	early flowers, autumn colours	Stipa pennata	30 - 60 cm	fine leaves
Geranium species and varieties	60 - 70 cm	needs staking after flowering	Stipa tenuissima	30 - 40 cm	often short lived, roaming with seeds
Helenium cultorum	80 - 150 cm	long-lived, better as leader			
Helleborus Orientalis hybrids	30 - 50 cm	evergreen, early flowering			
Hemerocallis cultorum	40 - 100 cm	very early shoots, autumn colours			
Heuchera hybrids	30 - 50 cm	only up front			
Hosta species and varieties	30 - 100 cm	long-lived, autumn colours			
Iris Barbata hybrids	40 - 70 cm	evergreen			
Kniphofia hybrids	50 - 100 cm	long-lived, evergreen			
Lathyrus vernus	30 - 40 cm	early flowering insect pasture			
Lavandula angustifolia varieties	30 - 60 cm	evergreen, subshrub			
Ligularia species	60 - 150 cm	better as leader			
Lychnis coronaria varieties	60 - 80 cm	heavily seeding			
Lysimachia clethroides	60 - 100 cm	late shoots, autumn colours			
Monarda fistulosa	80 - 120 cm	long-lived			
Nepeta faassenii varieties	60 - 90 cm	needs a lot of space			
Paeonia lactiflora	80 - 100 cm	early shoots, autumn colours			
Paeonia officinalis 'Rubra Plena'	70 - 80 cm	not attractive after flowering			
Phlox divaricata 'Blue Moon'	40 - 50 cm	long flowering, fragrant			
Phlox paniculata varieties	70 - 90 cm	long-lived, larger as leader			
Platycodon grandiflorus 'Mariesii'	50 - 60 cm	long flowering period			
Rudbeckia fulgida 'Goldsturm'	70 - 90 cm	long-lived, flowers long			
Salvia nemorosa varieties	40 - 60 cm	secondflowers after cutting			
Santolina chamaecyparissus	40 - 50 cm	evergreen, tolerates pruning			
Scabiosa columbaria varieties	30 - 40 cm	permanent flowering			
Sedum spectabile 'Rosenteller'	30 - 40 cm	long-lived, lateflowers			
Sedum telephium 'Herbstfreude'	50 - 70 cm	attractive into winter			
Solidago caesia	80 - 90 cm	better in wild gardens			
Stachys byzantina 'Big Ears'®	40 - 60 cm	wintergreen, decorative leaves			
Sympythium azureum	50 - 60 cm	not attractive after May			
Teucrium lucidrys	30 - 40 cm	evergreen, subshrub			
Verbascum species	60 - 180 (220) cm	short-lived, roaming with seeds			
Veronica austriaca teucrium 'Königsblau'	30 - 40 cm	just plant here and there, small groups			
Veronica longifolia	60 - 100 cm	neutral after July			
<b>Grasses</b>					
Bouteloua gracilis	20 - 40 cm	grass-like cushions			
Carex caryophyllea varieties	30 cm	evergreen, long-lived			
Carex morrowii 'Variegata'	30 - 40 cm	evergreen, long-lived			
Carex conica 'Snowline'®	20 - 30 cm	leaves dark green/white			
Carex grayi	30 - 60 cm	decorative seed stands			
Carex sylvatica	40 - 50 cm	evergreen			
Carex umbrosa	20 - 30 cm	evergreen			
Deschampsia cespitosa	30 - 50 cm	long-lived, evergreen			
Festuca gautieri varieties	20 - 35 cm	evergreen			
Festuca mairei	40 - 50 (80) cm	long-lived, sometimes leader			
Helictotrichon sempervirens	40 - 60 cm	long-lived, evergreen			
Koeleria glauca	15 - 40 cm	nearly evergreen			
Melica ciliata	30 - 50 cm	fine syncarpies			
Molinia caerulea varieties	25 - 50 cm	evergreen			
Panicum virgatum 'Rehbraun'	60 - 80 cm	long-lived, conspicuous autumn colours			
Pennisetum alopecuroides 'Hameln'	30 - 40 cm	long-lived, autumn colours into winter			
Sesleria caerulea	15 - 25 cm	winter green			
Sesleria heufleriana	40 - 70 cm	greyish green, winter green			





## Ground-covering perennials 4

### 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.

Genus/species/variety	Use in small spaces	Use in large spaces	Plants per m <sup>2</sup>
Acaena buchananii	+		7 - 12
Acaena microphylla varieties	+		7 - 12
Achillea tomentosa	+		7 - 12
Ajuga reptans varieties	+		9 - 16
Alchemilla epipsila		+	7 - 12
Alchemilla mollis		+	4 - 5
Alchemilla xanthochlora	+	+	9 - 12
Anaphalis triplinervis varieties	+		7 - 9
Antennaria dioica 'Rubra'	+		12 - 25
Arabis caucasica 'Schneehaube'	+		9 - 12
Arabis procurrens 'Glacier'	+		9 - 18
Artemisia stelleriana	+		5 - 7
Asarum europaeum	+		9 - 16
Aster divaricatus		+	3 - 4
Aster dumosus varieties	+	+	5 - 9
Astilbe chinensis pumila	+	+	5 - 9
Astrantia major varieties		+	4 - 7
Azorella trifurcata	+		12 - 16
Bergenia cordifolia hybrids	+	+	5 - 7
Brunnera macrophylla		+	5 - 7
Buglossoides purpurocaerulea		+	5 - 9
Campanula cochleariifolia	+		20 - 25
Campanula portenschlagiana varieties	+	+	12 - 16
Campanula rotundifolia	+	+	9 - 11
Centaurea montana		+	4 - 7
Cerastium tomentosum 'Silberteppich'	+		7 - 12

Genus/species/variety	Use in small spaces	Use in large spaces	Plants per m <sup>2</sup>
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
Euphorbia amygdaloides robbiae®		+	6 - 8
Fragaria vesca vesca	+		12 - 25
Galium odoratum	+	+	9 - 16
Geranium cantabrigiense varieties	+	+	7 - 16
Geranium cinereum 'Ballerina'	+	+	16 - 25
Geranium endressii		+	5 - 9
Geranium himalayense varieties		+	3 - 6
Geranium macrorrhizum varieties		+	4 - 9
Geranium nodosum	+	+	9 - 12
Geranium phaeum	+	+	5 - 7
Geranium renardii	+		5 - 12
Geranium sanguineum		+	5 - 12
Geum coccineum hybrids	+	+	9 - 16
Helianthemum cultorum	+		5 - 9
Iberis sempervirens varieties	+		5 - 7
Lamium galeobdolon 'Florentinum'		+	5 - 7
Lamium maculatum varieties	+	+	7 - 9
Liatris spicata varieties	+	+	5 - 7
Liriopae muscari varieties	+	+	12 - 16
Lysimachia nummularia	+		12 - 18
Matricaria caucasica	+		12 - 16
Nepeta faassenii	+	+	7 - 12
Oenothera missouriensis	+		5 - 7
Omphalodes verna varieties	+	+	7 - 16
Ophiopogon planiscapus 'Niger'	+	+	12 - 16
Phlomis russeliana		+	4 - 5
Polygonum affine 'Darjeeling Red'		+	7 - 16
Potentilla aurea	+		9 - 16
Potentilla neumanniana		+	12 - 16
Prunella grandiflora	+		9 - 16
Pulmonaria species and 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 varieties	+		7 - 12
Sympetrum 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
Viola labradorica	+	+	15 - 20
Viola odorata 'Königin Charlotte'	+	+	12 - 15





## 4 Ground-covering perennials

Genus/species/variety	Use in small spaces	Use in large spaces	Plants per m <sup>2</sup>	from April	Flowering time	Genus/species/variety	Flower colour
<b>Ground-covering perennials</b>							
Viola sororia 'Albiflora'	+	+	12 - 15	IV - V	Bergenia cordifolia 'Rotblum'	carmine	
Waldsteinia geoides	+	+	7 - 12	IV - V	Bergenia Hybride 'Silberlicht'	white with carmine	
Waldsteinia ternata	+	+	9 - 16	IV - V	Brunnera macrophylla	pure blue	
				IV - V	Brunnera macrophylla 'Jack Frost'*	light blue	
				IV - V	Buglossoides purpurocaerulea	gentian blue	
				IV - V	Epimedium pinnatum colchicum	bright yellow	
				IV - V	Epimedium versicolor 'Sulphureum'	sulphur yellow	
				IV - V	Epimedium warleyense 'Orangenkönigin'	bright-orange	
				IV - V	Epimedium youngianum 'Niveum'	pale white	
				IV - V	Euphorbia myrsinifolia	yellow-green	
				IV - V	Fragaria vesca	white	
				IV - V	Galium odoratum	white	
				IV - V	Lamium maculatum 'Chequers'	carmine pink	
				IV - V	Lamium maculatum 'Silbergroschen'	crimson-pink	
				IV - V	Lathyrus vernus	violet-red-blue	
				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	
				(III) IV - V	Potentilla neumanniana	golden yellow	
				IV - V	Primula veris	golden yellow	
				IV - V	Pulmonaria saccharata 'Sissinghurst White'	pure white	
				IV - V	Vinca major	blue	
				IV - V	Viola labradorica	light purple	
				IV - V	Waldsteinia geoides	yellow	
				IV - V	Waldsteinia ternata	yellow	
				IV - VI	Anemone sylvestris	white	
				IV - VI	Euphorbia species and varieties	yellow bracts	
				IV - VI	Heuchera Micrantha hybrids	white	
				IV - VI	Phlox divaricata 'Blue Moon'	blue-violet	
				IV - VI	Polemonium caeruleum	blue	
				IV - VI	Sympetrum azureum	sky blue	
				IV - VI	Vinca minor	blue	
				IV - VII/IX	Chrysogonum virginianum	light to golden yellow	
				IV - IX	Eupatorium rugosum 'Chocolate'	white	
<b>Grasses</b>							
Ammophila arenaria		+	7 - 9				
Carex foliosissima varieties	+	+	7 - 9				
Hakonechloa macra	+	+	9 - 12				
Leymus arenarius		+	5 - 7				

## 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.

til March	Flowering time	Genus/species/variety	Flower colour	from May	Genus/species/variety	Flower colour
	XII - II/III	Helleborus niger	milky white with green		Chrysanthemum leucanthemum 'Maikönigin'	milky white
	II - IV	Helleborus Orientalis hybrids	white, pink, red		Convallaria majalis	milky white
<b>from March</b>						
	III - IV	Anemone nemorosa	white, light pink on the outside		Paeonia officinalis 'Rubra Plena'	blood-red
	III - IV	Epimedium perralderianum 'Frohnleiten'	yellow		Allium afghanense 'Purple Sensation'	purple-violet
	III - IV	Pulsatilla vulgaris	violet to violet blue		Antennaria dioica 'Rubra'	pink-red
	III - IV (IX)	Viola odorata 'Königin Charlotte'	blue-violet		Aquilegia Hybride 'Bläue Töne'	intense blue
	III - IV/IX	Caltha palustris	golden yellow		Aquilegia vulgaris	blue to red-violet
	III - V	Alyssum montanum 'Berggold'	bright yellow		Aruncus aethusifolius	milky white
	III - V	Omphalodes verna	sky blue		Campanula glomerata 'Alba'	pure white
	III - V	Omphalodes verna 'Alba'	white		Cerastium tomentosum 'Silberteppich'	pale white
	III - V	Primula elatior	light yellow		Dicentra spectabilis	pink to carmine
	III - V	Pulmonaria angustifolia 'Azorea'	gentian blue		Dicentra spectabilis 'Alba'	pure white
	III - V	Pulmonaria rubra	coral red		Dryas suendermannii	cream white to light yellow
	III - V	Sympetrum grandiflorum	cream yellow		Geranium himalayense 'Gravetye'	bright blue
<b>from April</b>						
	IV - V	Ajuga reptans	purple-blue		Geranium macrorrhizum 'Spessart'	white with light pink
	IV - V	Ajuga reptans 'Atropurpurea'	violet		Geranium magnificum	purperviolet
	IV - V	Alyssum saxatile 'Compactum'	yellow			
	IV - V	Arabis arendsi 'Compinkie'	light to dark pink			
	IV - V	Arabis caucasica 'Schneehaube'	white			
	IV - V	Arabis procurrens 'Glacier'	white			
	IV - V	Aubrieta cultorum 'Royal Red'	magenta-red			
	IV - V	Bergenia cordifolia	carmine			

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





# Flowering calendar 5

from May	Flowering time	Genus/species/variety	Flower colour	from June	Flowering time	Genus/species/variety	Flower colour
V - VI		<i>Geranium phaeum</i>	chocolate brown to purple	VI - VII		<i>Achillea Clypeolata</i> hybr. 'Moonshine'	sulphurous yellow
V - VI		<i>Geranium pratense</i> 'Johnson's Blue'	purple-blue	VI - VII		<i>Achillea Filipendulina</i> hybrid 'Credo'	light cream-yellow
V - VI		<i>Geranium sanguineum</i>	carmine to carmine-red	VI - VII		<i>Achillea Millefolium</i> hybrid 'Terracotta'	orange-brown
V - VI		<i>Geum coccineum</i> 'Borisii'	orange-red	VI		<i>Aquilegia alpina</i>	pure blue
V - VI		<i>Heuchera sanguinea</i> 'Leuchtkäfer'	dark scarlet	VI		<i>Dianthus deltoides</i> 'Alba'	white with pink mottling
V - VI		<i>Heuchera sanguinea</i> 'Red Spangles'	bright red	VI		<i>Hemerocallis cultorum</i> 'Corky'	golden yellow
V - VI		<i>Iris pseudacorus</i>	yellow	VI - VII		<i>Achillea millefolium</i> 'Cerise Queen'	carmine
V - VI		<i>Lamium orvala</i>	brown-pink	VI - VII		<i>Achillea tomentosa</i> 'Aurea'	golden yellow
V - VI		<i>Lamiastrum galeobdolon</i> 'Florentinum'	light yellow	VI - VII		<i>Aconitum napellus</i>	dark blue
V - VI		<i>Lysimachia nummularia</i>	yellow	VI - VII		<i>Alchemilla epipsila</i>	greenish yellow
V - VI		<i>Paeonia lactiflora</i> 'Karl Rosenfield'	dark wine-red	VI - VII		<i>Anaphalis triplinervis</i> 'Sommerschnee'	milky white
V - VI		<i>Paeonia lactiflora</i> 'Immaculée'	white, yellow in the centre	VI - VII		<i>Anchusa azurea</i> 'Dropmore'	bright blue
V - VI		<i>Paeonia lactiflora</i> 'Sarah Bernhardt'	light silvery pink	VI - VII		<i>Artemisia ludoviciana</i> 'Silver Queen'	grey
V - VI		<i>Polygonatum multiflorum</i>	greenish white	VI - VII		<i>Aruncus dioicus</i>	cream-white
V - VI		<i>Saxifraga urbinum</i> 'Clarence Elliott'	pink	VI - VII		<i>Astrantia major</i>	silvery white with pink
V - VI		<i>Tellima grandiflora</i>	greenish pink	VI - VII		<i>Astrantia major</i> 'Roma'®	silvery pink
V - VI		<i>Thymus doerfleri</i> 'Bressingham Seedling'	pink	VI - VII		<i>Azorella trifurcata</i>	green-yellow
V - VI		<i>Tiarella cordifolia</i>	pale white with pink	VI - VII		<i>Bistorta officinalis</i> 'Superbum'	light pink
V - VI		<i>Veronica austriaca</i> teucrium 'Königsblau'	bright blue	VI - VII		<i>Campanula carpatica</i> 'Bläue Clips'	violet blue
V - VI		<i>Viola sororia</i> 'Albiflora'	white	VI - VII		<i>Campanula carpatica</i> 'Weiße Clips'	pure white
V - VII		<i>Centaurea montana</i>	blue	VI - VII		<i>Campanula cochleariifolia</i> 'Bavaria Blue'	intense blue
V - VII		<i>Geranium macrorrhizum</i> 'Ingwersen'	light to pale pink	VI - VII		<i>Campanula latifolia</i> macrantha	blueviolet
V - VII		<i>Geranium macrorrhizum</i> 'Spessart'	whitish pink	VI - VII		<i>Campanula persicifolia</i> 'Grandiflora Alba'	pure white
V - VII		<i>Geum coccineum</i> 'Borisii'	bright orange	VI - VII		<i>Campanula persicifolia</i> 'Grandiflora Coerulea'	porcelain blue
V - VII		<i>Gypsophila repens</i> 'Rosea'	pink	VI - VII		<i>Delphinium grandiflorum</i> 'Blauer Zwerg'	bright - sky blue
V - VII		<i>Potentilla aurea</i>	yellow	VI - VII		<i>Dianthus deltoides</i> 'Brilliant'	bright - ruby red
V - VI		<i>Saxifraga urbinum</i>	white	VI - VII		<i>Dicentra eximia</i>	crimson-pink
V - VII (IX)		<i>Geranium endressii</i> varieties	dark pink	VI - VII		<i>Digitalis purpurea</i> 'Gloxiniaeflora'	pink, carmine, crimson
V - VII (IX)		<i>Geranium gracile</i> 'Sirak'	violet pink	VI - VII		<i>Geranium catabrigiense</i> 'Biokovo'	white with pink shimmer
V - VIII		<i>Gypsophila repens</i> 'Rosenschleier'	pink	VI - VII		<i>Geranium catabrigiense</i> 'Cambridge'	dark pink
V/VIII		<i>Iris barbata elatior</i> 'Lovely Again'	lavender	VI - VII		<i>Geranium clarkei</i> 'Kashmir White'	white with pink veins
V - VIII		<i>Nepeta faassenii</i> 'Alba'	white	VI - VII		<i>Geranium renardii</i>	whitish pink
V - IX		<i>Corydalis lutea</i>	light yellow to yellow	VI - VII		<i>Geranium renardii</i> 'Philippe Vapelle'	blueviolet
V - IX		<i>Fragaria vesca</i> semperflorens varieties	white/pink	VI - VII		<i>Geum chiloense</i> 'Goldball'	yellow
V - IX		<i>Helianthemum cultorum</i> 'Bronzeteplich'	brown orange	VI - VII		<i>Hemerocallis cultorum</i> 'Pink Damask'	pink with salmon-orange
V - IX		<i>Helianthemum cultorum</i> 'Cerise Queen'	carmine	VI - VII		<i>Hemerocallis cultorum</i> 'Stella de Oro'	golden yellow
V - IX		<i>Helianthemum cultorum</i> 'Lawrensons Pink'	intense pink	VI - VII		<i>Hosta crispula</i>	light purple
V - IX		<i>Helianthemum cultorum</i> 'Rubin'	ruby red	VI - VII		<i>Iberis sempervirens</i> varieties	bright white
V - IX		<i>Helianthemum cultorum</i> 'Snow Queen'	white	VI - VII		<i>Lychis coronaria</i> 'Alba'	white
V - IX		<i>Helianthemum cultorum</i> 'Sterntaler'	golden yellow	VI - VII		<i>Rodgersia aesculifolia</i>	cream-white
V - IX		<i>Nepeta faassenii</i> and varieties	purple	VI - VII		<i>Sanguisorba officinalis</i> 'Tanna'	crimson
V - X		<i>Geranium nodosum</i>	pink, with dark veins	VI - VII		<i>Sagina subulata</i>	white
V - VI/IX		<i>Salvia pratensis</i>	medium blue	VI - VII		<i>Sedum acre</i>	bright yellow
V - X		<i>Teucrium lucidrys</i>	crimson-pink	VI - VII		<i>Sedum album</i> 'Coral Carpet'	white with pink shimmer
				VI - VII		<i>Sedum floriferum</i> 'Weihenstephaner Gold'	golden yellow
				VI - VII		<i>Sedum hybridum</i> 'Immergrünchen'	yellow
				VI - VII		<i>Thalictrum aquilegiforme</i>	violet-pink
				VI - VII		<i>Veronica spicata incana</i>	dark blue
				VI - VII/VIII		<i>Gypsophila paniculata</i> 'Schneeflocke'	pale white
				VI - VII/IX		<i>Alchemilla mollis</i>	yellow-green
				VI - VIII		<i>Alchemilla xanthochlora</i>	greenish yellow
				VI - IX		<i>Buphthalmum salicifolium</i>	yellow

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





## 5 Flowering calendar

from June	Flowering time	Genus/species/variety	Flower colour	from July	Flowering time	Genus/species/variety	Flower colour
VI - VII/IX		Delphinium belladonna 'Casa Blanca'	white	VII		Artemisia schmidtiana 'Nana'	grey-white
VI - VII/IX		Geum Hybride 'Dolly North'	orange-red	VII		Astilbe Arendsii 'Fanal'	ruby red
VI - VIII		Campanula glomerata 'Dahurica'	deep violet blue	VII		Hosta sieboldiana 'Elegans'	whitish purple
VI - VIII		Campanula portenschlagiana 'Birch'	violet	VII - VIII		Aster amellus 'Rudolf Goethe'	lavender blue
VI - VIII		Campanula poscharskyana 'Blauranke'	light violet blue	VII - VIII		Aster amellus 'Sternkugel' a.o.	light violet
VI - IX		Centranthus ruber 'Albus'	white	VII - VIII		Astilbe Arendsii 'Bräutschleier'	white to cream-white
VI - IX		Chelone obliqua	purple pink	VII - VIII		Astilbe chinensis taquetii 'Purpurlanze'	crimson red
VI - VIII		Coreopsis lanceolata 'Sterntaler'	golden yellow with red browns	VII - VIII		Astilbe Glaberrima hybrid 'Sprite'	pearl pink
VI - IX		Dianthus carthusianorum	crimson	VII - VIII		Campanula rotundifolia 'Olympica'	blue-violet
VI - VIII		Digitalis grandiflora	sulphur yellow	VII - VIII		Campanula trachelium	violet-blue
VI - VIII		Echinacea purpurea 'Alba'	white	VII - IX		Echinacea purpurea	carmine
VI - VIII		Echinacea purpurea 'Fatal Attraction'*	dark crimson-pink	VII - VIII		Helenium cultorum 'Moerheim Beauty'	mahogany-red
VI - VIII		Echinacea purpurea 'Magnus'	carmine	VII - VIII		Helenium cultorum 'Waltraud'	copper-red with yellow
VI - VIII		Linum perenne 'Saphir'	bright blue	VII - VIII		Hemerocallis cultorum 'Sammy Russel'	tile-red
VI - VIII		Lysimachia punctata	yellow	VII - VIII		Hosta fortunei 'Aureomarginata'	light violet
VI - VIII		Lythrum salicaria	carmine	VII - VIII		Hosta 'Royal Standard'	milky white
VI - VIII		Nuphar lutea	yellow	VII - VIII		Inula ensifolia	yellow
VI - VIII		Nymphaea alba	milky white	VII - VIII		Inula magnifica	golden yellow
VI - VIII		Nymphaea Hybride 'James Brydon'	carmine	VII - VIII		Lavandula angustifolia 'Dwarf Blue'	deep blue
VI - VIII		Nymphaea Hybride 'Marliacea Chromatella'	light yellow	VII - VIII		Lavandula angustifolia varieties	purple to violet
VI - VIII		Nymphaea odorata 'Rosennymphe'	intense pink, light pink	VII - VIII		Liatris spicata 'Floristan Violett'	crimson-violet
VI - VIII		Phlomis russeliana	light yellow	VII - VIII		Macleaya cordata	cream-white
VI - VIII		Platycodon grandiflorus 'Mariesii'	blueviolet	VII - VIII		Phlox paniculata 'Starfire'	bright tile-red
VI - VIII		Primula bulleyana	salmon-pink, whitish pink, yellow, golden yellow-orange, apricot, orange, salmon	VII - VIII		Santolina chamaecyparissus	yellow
VI - VIII		Prunella grandiflora	crimson-violet	VII - VIII		Sedum spurium 'Album Superbum'	white
VI - VIII		Ranunculus lingua	yellow	VII - VIII		Sedum spurium 'Fuldaglut'	carmine
VI - VIII		Sagittaria sagittifolia	white	VII - VIII		Veronica longifolia	light blue
VI - VIII		Stratiotes aloides	white	VII/IX		Delphinium elatum 'Finsterahorn'	violet blue with black
VI - VIII		Thymus serpyllum 'Coccineus'	crimson red	VII - IX		Achillea ptarmica 'Boule de Neige'	white
VI - VIII		Verbascum olympicum	bright yellow	VII - IX		Agastache Rugosa hybr. 'Black Adder'*	dark violet
VI - VIII/IX		Delphinium belladonna 'Atlantis'	dark blue-violet	VII - IX		Butomus umbellatus	pink
VI - IX		Achillea filipendulina varieties	golden yellow	VII - IX		Echinacea pallida	light pink
VI - IX		Aconogonon speciosum 'Johanniswolke'	cream-white	VII - IX		Echinacea purpurea	carmine
VI - IX		Calamintha nepeta nepeta	whitish purple	VII - IX		Echinops bannaticus 'Blue Glow'	intense steel blue
VI - IX		Centranthus ruber 'Coccineus'	carmine pink	VII - IX		Echinops ritro	steel blue
VI - IX		Coreopsis verticillata 'Moonbeam'	light yellow	VII - IX		Eryngium planum	steel blue
VI - IX		Coreopsis verticillata 'Zagreb'	golden yellow	VII - IX		Heliopsis scabra 'Goldgefieder'	golden yellow
VI - IX		Geranium cinereum 'Ballerina'	purple-violet	VII - IX		Heliopsis scabra 'Spitztänzerin'	orange-yellow
VI - IX		Malva moschata	pink	VII - IX		Kniphofia hybrids	yellow to orange-yellow, orange-yellow to orange, orange-red to red
VI - IX		Oenothera missouriensis	light to citrus yellow	VII - IX		Liatris spicata 'Floristan Weiß'	white
VI - IX		Origanum vulgare 'Compactum'	violet-pink	VII - IX		Lysimachia clethroides	white
VI - IX		Polygonum affine 'Darjeeling Red'	pink to crimson-pink	VII - IX		Monarda hybrid 'Cambridge Scarlet'	scarlet
VI - IX		Alisma plantago	white to whitish pink	VII - IX		Monarda hybrid 'Croftway Pink'	salmon pink
VI - X		Filipendula ulmaria	cream-white	VII - IX		Monarda hybrid 'Präriennacht'	deep crimson red
VI - X (XI)		Geranium endressii	pink	VII - IX		Origanum laevigatum 'Herrenhausen'	red-violet
				VII - IX		Rudbeckia fulgida deamii	golden yellow
				VII - IX		Rudbeckia fulgida 'Goldsturm'	golden yellow with black
				VII - IX		Solidago sphacelata 'Golden Fleece'	yellow
				VII - X		Bistorta amplexicaulis J. S. Caliente*	dark red
				VII - X		Scabiosa columbaria varieties	blue-violet
				VII - X		Ophiopogon planiscapus 'Niger'	white
				VII - X		Verbena bonariensis 'Lollipop'	violet

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





from August	Flowering time	Genus/species/variety	Flower colour
VIII		<i>Hosta lancifolia</i>	crimson-violet
VIII		<i>Hosta Tardiflora hybrid</i>	lavender
VIII		<i>Hosta ventricosa</i>	crimson-violet
VIII		<i>Phlox paniculata 'Eventide'</i>	light purple-blue
VIII		<i>Phlox paniculata varieties</i>	pink to carmine
VIII		<i>Phlox paniculata 'Kirmesländer'</i>	white with pink bud
VIII - IX		<i>Anemone hupehensis 'Septembercharme'</i>	light pink-carmine
VIII - IX		<i>Anemone Japonica hybrid</i>	pure white
VIII - IX		<i>Aster amellus 'Lady Hindlip'</i>	pink
VIII - IX		<i>Aster divaricatus</i>	pale white
VIII - IX		<i>Aster divaricatus 'Tradescant'</i>	white
VIII - IX		<i>Aster sedifolius 'Nanus'</i>	blue-violet
VIII - X		<i>Aster liniopsis</i>	golden yellow
VIII - IX		<i>Astilbe chinensis pumila</i>	violet-pink
VIII - IX		<i>Cimicifuga racemosa cordifolia</i>	cream-white
VIII - IX		<i>Helenium hybrid 'Kugelsonne'</i>	yellow
VIII - IX		<i>Hosta hybrid 'Sum and Substance'</i>	purple to lavender blue
VIII - IX		<i>Ligularia in species and varieties</i>	yellow to golden yellow
VIII - IX		<i>Phlox paniculata 'Nympheburg'</i>	white
VIII - IX		<i>Phlox paniculata 'Pax'</i>	pure white
VIII - IX		<i>Rudbeckia nitida 'Herbstsonne'</i>	yellow
VIII - IX		<i>Sedum spectabile 'Carl'</i>	dark pink
VIII - IX		<i>Sedum telephium 'Matrona'</i>	pink to brownish-pink
VIII - X		<i>Liriope muscari varieties</i>	blue violet
from September	Flowering time	Genus/species/variety	Flower colour
IX		<i>Cimicifuga ramosa 'Atropurpurea'</i>	white with pink shimmer
IX - X		<i>Aconitum carmichaelii 'Arendsii'</i>	violet blue
IX - X		<i>Anemone Japonica 'Prinz Heinrich'</i>	crimson red
IX - X		<i>Aster amellus 'Veilchenkönigin'</i>	dark violet
IX - X		<i>Aster dumosus Herbstgruß vom Bresserhof'</i>	pink-red
IX - X		<i>Aster dumosus 'Kassel'</i>	carmine
IX - X		<i>Aster dumosus 'Professor Anton Kippenberg'</i>	blue
IX - X		<i>Aster dumosus 'Schneekissen'</i>	white
IX - X		<i>Aster dumosus 'Wachsenburg'</i>	violet-pink
IX - X		<i>Aster novae-angliae 'Barr's Blue'</i>	dark lavender blue
IX - X		<i>Aster novae-angliae 'Purple Dome'</i>	dark ruby-pink
IX - X		<i>Aster novae-angliae 'Rudelsburg'</i>	salmon pink
IX - X		<i>Aster novi-belgii 'Bläue Nachhut'</i>	light lavender blue
IX - X		<i>Aster novi-belgii 'Dauerblau'</i>	dark purple-blue
IX - X		<i>Cimicifuga simplex 'Brunette'</i>	whitish pink
IX - X		<i>Cortaderia selliana</i>	silvery white
IX - X		<i>Misanthus sinensis varieties</i>	silvery
IX - X		<i>Saxifraga cortusifolia fortunei</i>	white
IX - X		<i>Sedum telephium 'Herbstfreude'</i>	carmine-crimson to carmine-brown
IX - X		<i>Solidago caesia</i>	golden yellow
IX - XI		<i>Ceratostigma plumbaginoides</i>	gentian blue

## 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 mono-chrome 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
<i>Astilbe Arendsiis hybrid 'Fanal'</i>	ruby red	VII
<i>Astrantia major 'Star of Beauty'®</i>	violet-red/white centre	VI - VII
<i>Bergenia hybrid 'Eroica'</i>	violet-red	IV - V
<i>Bistorta amplexicaulis 'J. S. Caliente'®</i>	dark red	VII - X
<i>Dianthus carthusianorum</i>	crimson	VI - IX
<i>Dianthus deltoides 'Brilliant'</i>	bright ruby red	VI - VII
<i>Echinacea purpurea 'Magnus'</i>	carmine	VII - VIII
<i>Epimedium alpinum</i>	red sepals/yellow petals	IV - V
<i>Geum coccineum 'Borisii'</i>	orange-red	V - VI
<i>Geum hybrid 'Dolly North'</i>	orange-red	VI - VII/IX
<i>Helenium cultorum 'Moerheim Beauty'</i>	mahogany-red	VII - VIII
<i>Helenium cultorum 'Waltraud'</i>	copper-red with yellow	VII - VIII
<i>Helianthemum cultorum 'Bronzeteppich'</i>	brown orange	V - IX
<i>Helleborus Orientalis hybrid 'Red Hybrids'</i>	burgundy	II - IV
<i>Hemerocallis cultorum 'Sammy Russel'</i>	tile-red	VII - VIII
<i>Heuchera sanguinea 'Leuchtäfer'</i>	dark scarlet	V - VI
<i>Heuchera sanguinea 'Red Spangles'</i>	bright red	V - VI
<i>Knautia macedonica 'Mars Midget'</i>	dark ruby red	VI - X
<i>Kniphofia hybrids</i>	orange-red to red	VII - IX
<i>Lamium orvala</i>	brownish red	V - VI
<i>Monarda fistulosa 'Cambridge Scarlet'</i>	scarlet	VII - IX
<i>Paeonia lactiflora 'Karl Rosenfield'</i>	dark wine-red	V - VI
<i>Paeonia officinalis 'Rubra Plena'</i>	blood-red	V
<i>Phlox paniculata 'Starfire'</i>	bright tile-red (signal red)	VII - VIII
<i>Pulmonaria rubra</i>	coral red	III - V

Explanation of symbols: I - XII = flowering period month from 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.

Genus/species/variety	Flower colour	Flowering time
Achillea Millefolium hybrid 'Terracotta'	orange-brown, later orange-ochre	VI - VII
Epimedium warleyense 'Orangenkönigin'	bright orange	IV - V
Geum coccineum 'Borrisii'	bright orange	V - VII
Heliopsis scabra 'Spiztenänzerin'	orange-yellow	VII - IX
Kniphofia hybrids	orange-yellow to orange	VII - IX

## 8 Yellow-flower perennials

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 Clypeolata hybrid 'Moonshine'	sulphurous yellow	VI - VII/IX A
Achillea filipendulina varieties	golden yellow	VI - IX
Achillea Filipendulina hybrid 'Credo'	light cream-yellow	VI - VII/IX
Achillea tomentosa 'Aurea'	golden yellow	VI - VII
Alchemilla epipsila	greenish-yellow	VI - VII
Alchemilla mollis	yellow-green	VI - VII/IX
Alyssum montanum 'Berggold'	bright yellow	III - V
Alyssum saxatile 'Compactum'	yellow	IV - V
Aster linosyris	golden yellow	VII - X
Buphthalmum salicifolium	yellow	VI - IX
Chrysogonium virginianum	light to golden yellow	IV - VII/IX
Coreopsis lanceolata 'Sterntaler'	golden yellow with redbrown base	VI - VIII
Coreopsis verticillata 'Grandiflora'	bright yellow	VI - IX
Coreopsis verticillata 'Moonbeam'	bright yellow	VI - IX
Coreopsis verticillata '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 pinnatum colchicum	bright yellow	IV - V
Epimedium versicolor 'Sulphureum'	sulphur-yellow	IV - V
Euphorbia myrsinites	yellow-green	IV - V
Euphorbia polychroma	bright yellow bracts	IV - VI
Euphorbia amygdaloides varieties	lime green to greenish yellow	VII - IX
Geum chiloense 'Goldball'	yellow	VI - VII
Helenium Hybride 'Kugelsonne'	yellow	VIII - IX
Helianthemum cultorum 'Sterntaler'	golden yellow	V - IX
Hemerocallis cultorum 'Corky'	golden yellow	VI
Hemerocallis cultorum 'Stella de Oro'	golden yellow to orange yellow	VI - VII

Genus/species/variety	Flower colour	Flowering time
Inula ensifolia	yellow	VII - VIII
Inula magnifica	golden yellow	VII - VIII
Kniphofia hybrids	yellow to orange yellow	VII - IX
Lamiastrum 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
Phlomis russeliana	light yellow	VI - VIII
Potentilla aurea	yellow	V - VII
Potentilla neumanniana	golden yellow	IV - VI
Primula elatior	light yellow	III - V
Primula veris	golden yellow, orange spot	(III)IV - V
Rudbeckia fulgida deamii	intense golden yellow	VIII - IX(X)
Rudbeckia fulgida 'Goldsturm'	golden yellow with black centre	VII - IX
Rudbeckia nitida 'Herbstsonne'	yellow	VIII - IX
Santolina chamaecyparissus	yellow	VII - VIII
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
Solidago sphacelata 'Golden Fleece'	dark yellow	VII - IX
Symphytum grandiflorum	cream yellow	III - V
Verbascum olympicum	bright yellow	VI - VIII
Waldsteinia geoides	yellow	IV - V
Waldsteinia ternata	yellow	IV - V

### Aquatic plants

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

### Overview autumn colours

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 cultorum	yellow to greenish yellow
Hosta species and varieties	bright yellow
Hosta fortunei 'Aureo-marginata'	green leaves with yellow margin
Hosta hybrid 'Sum and Substance'	shoots bright yellow, then citrus yellow to yellowish green
Macleaya cordata	light yellow
Polygonatum multiflorum	light yellow
Scirpus tabernaemontani	green stalk with yellow horizontal stripes
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

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





## Purple and violet-flower perennials 10

### 9 Blue-flower perennials

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 (Johann Wolfgang von Goethe: "Blue - an attractive nothing.").

Genus/species/variety	Flower colour	Flowering time
<i>Aconitum carmichaelii</i> 'Arendsii'	violet blue	IX - X
<i>Aconitum napellus</i>	dark blue	VI - VII
<i>Agastache Rugosa</i> hybr. 'Black Adder'®	dark blue-violet	VI - IX
<i>Ajuga reptans</i>	purple-blue	IV - V
<i>Anchusa azurea</i> 'Dropmore'	bright blue	VI - VII
<i>Aquilegia alpina</i>	pure blue	VI
<i>Aquilegia</i> 'Bläue Töne'	intense blue	V - VI
<i>Aquilegia vulgaris</i>	purple-blue	V - VI
<i>Aster amellus</i> 'Rudolf Goethe'	lavender blue	VII - VIII
<i>Aster Dumosus</i> hybrid		
'Professor Anton Kippenberg'	blue	IX - X
<i>Aster novae-angliae</i> 'Barr's Blue'	dark lavender blue	IX - X
<i>Aster novi-belgii</i> 'Blau Nachhut'	light lavender blue	IX - X
<i>Aster novi-belgii</i> 'Dauerblau'	dark purple-blue	IX - X
<i>Aster sedifolius</i> 'Nanus'	blue-violet	VIII - IX
<i>Brunnera macrophylla</i>	pure blue	(III) IV - V
<i>Brunnera macrophylla</i> 'Jack Frost'	light blue	IV - V
<i>Buglossoides purpureo-caerulea</i>	gentian blue	IV - V
<i>Campanula carpatica</i> 'Blau Clips'	violet blue	VI - VII
<i>Campanula cochleariifolia</i> 'Bavaria Blue'	intense blue	VI - VIII
<i>Campanula persicifolia</i> 'Grandiflora Coerulea'	porcelain blue	VI - VII
<i>Campanula poscharskyana</i> 'Blauranke'	light violet blue	VI - VIII
<i>Campanula rotundifolia</i> 'Olympica'	blue-violet	VII - VIII
<i>Campanula trachelium</i>	violet-blue	VII - VIII
<i>Centaurea montana</i>	blue	V - VII
<i>Ceratostigma plumbaginoides</i>	gentian blue	IX - XI
<i>Delphinium grandiflorum</i> 'Blauer Zwerg'	brights sky blue	VI - VII
<i>Echinops bannaticus</i> 'Blue Glow'	intense steel-blue	VII - IX
<i>Echinops ritro</i>	shimmering steel-blue	VII - IX
<i>Geranium himalayense</i> 'Gravetye'	bright blue	V - VI
<i>Geranium pratense</i> 'Johnson's Blue'	purple-blue	V - VI
<i>Hosta</i> hybrid 'Sum and Substance'	lavender blue	VIII - IX
<i>Lavandula angustifolia</i> 'Dwarf Blue'	deep blue	VII - VIII
<i>Lavandula angustifolia</i> 'Munstead'	intense lavender blue	VII - VIII
<i>Linum perenne</i> 'Saphir'	bright blue	VI - VIII
<i>Omphalodes verna</i>	sky blue	III - V
<i>Phlox divaricata</i> 'Blue Moon'	light to medium blue	IV - VI
<i>Platycodon grandiflorus</i> 'Mariesii'	blue-violet	VI - VIII
<i>Polemonium caeruleum</i>	blue	IV - VI
<i>Pulmonaria angustifolia</i> 'Azurea'	gentian blue	III - V
<i>Salvia nemorosa</i> 'Blauhügel'	blue	VI/VII
<i>Sympetrum azureum</i>	sky blue	IV - VI

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

Genus/species/variety	Flower colour	Flowering time
<i>Veronica austriaca</i> teucrium 'Königsblau'	bright blue	V - VI
<i>Veronica longifolia</i>	light blue	VII - VIII
<i>Veronica peduncularis</i> 'Georgia Blue'®	striking gentian blue	V - VII
<i>Veronica teucrium</i> 'Knallblau'	striking gentian blue	V - VI
<i>Veronica spicata</i> incana	dark blue	VI - VII
<i>Vinca major</i>	blue	IV - V
<i>Vinca minor</i>	blue	IV - VI
<i>Viola odorata</i> 'Königin Charlotte'	blueviolet	III - IV (IX)

### 10 Purple and violet-flower perennials

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 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 amellus</i> 'Sternkugel' varieties	light violet	VII - VIII
<i>Aster amellus</i> 'Veilchenkönigin'	dark ruby-pink	IX - X
<i>Aster novae - angiae</i> 'Purple Dome'	dark ruby-pink	IX - X
<i>Aster novi - belgii</i> 'Dauerblau'	purple-blue	IX - X
<i>Aubrieta cultorum</i> varieties	velvety dark violet	IV - V
<i>Calamintha nepeta</i>	whitish purple	VI - IX
<i>Campanula carpatica</i> 'Blau Clips'	light blue-violet	VI - VII
<i>Campanula glomerata</i> 'Dahurica'	deep violet blue	VI - VIII
<i>Campanula latifolia</i> macrantha	blueviolet	VI - VII
<i>Campanula portenschlagiana</i> 'Birch'	violet	VI - VIII
<i>Campanula poscharskyana</i> 'Blauranke'	purple to violet-blue	VI - VIII
<i>Delphinium belladonna</i> 'Atlantis'	dark blue-violet	VI - VIII/IX
<i>Delphinium elatum</i> 'Finsterhaarhorn'	violet blue with black	VII/IX
<i>Geranium cinereum</i> 'Ballerina'	crimson-violet	VI - IX
<i>Geranium himalayense</i> 'Gravetye'	blue with crimson, appears violet	V - VI
<i>Geranium magnificum</i>	crimson-violet	V - VI
<i>Geranium phaeum</i>	chocolate brown to crimson-violet	V - VI
<i>Geranium renardii</i> 'Philippe Vapelle'	blueviolet	VI - VII
<i>Geranium sylvaticum</i> 'Birch Lilac'	violet-blue	VI - VII
<i>Geranium sylvaticum</i> 'Mayflower'	blue-violet with white „eye“	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





## 10 Purple or violet-flower perennials

Genus/species/variety	Flower colour	Flowering time	Genus/species/variety	Flower colour	Flowering time
<i>Hosta sieboldiana</i> 'Elegans'	whitish purple	VII	<i>Aubrieta cultorum</i> 'Royal Red'	magenta-red	IV - V
<i>Hosta tardiflora</i> 'Halcyon'	lavender	VIII	<i>Bergenia cordifolia</i>	carmine	IV - V
<i>Hosta ventricosa</i>	crimson-violet	VIII	<i>Bergenia cordifolia</i> 'Rotblum'	carmine	IV - V
<i>Hosta hybrid</i> 'Sum and Substance'	purple to lavender-blue	VIII - IX	<i>Bergenia</i> 'Silberlicht'	white with carmine	IV - V
<i>Iris barbata elatior</i> 'Lovely Again'	lavender	V/VII	<i>Bistorta officinalis</i> 'Superbum'	light to antique pink	VI - VII
<i>Lathyrus vernus</i>	first red-violet, later violet-blue	IV - V	<i>Chelone obliqua</i>	purple-pink	VII - IX
<i>Lavandula angustifolia</i> varieties	purple to violet	VII - VIII	<i>Centranthus ruber</i> 'Coccineus'	carmine pink	VI - IX
<i>Liriope muscari</i> varieties	blue-violet	VII - X	<i>Dianthus deltoides</i> 'Brilliant'	bright ruby-red	VI - VII
<i>Nepeta faassenii</i> varieties	purple	V - IX	<i>Dicentra eximia</i>	crimson-pink	VI - VII
<i>Phlox paniculata</i> 'Eventide'	light purple-blue	VIII	<i>Dicentra spectabilis</i>	pink to carmine	V - VI
<i>Phlox subulata</i> (G. F. Wilson)	light purple-blue	IV - V	<i>Digitalis purpurea</i> 'Gloxiniaeflora'	pink, carmine, crimson	VI - VII
<i>Prunella grandiflora</i>	crimson-violet	VI - VIII	<i>Echinacea pallida</i>	light pink, orange-brown in the centre	VII - IX
<i>Pulmonaria saccharata</i> 'Mrs. Moon'	first pink, later blue-violet	IV - V	<i>Echinacea purpurea</i>	carmine	VII - IX
<i>Pulsatilla vulgaris</i>	violet to violet blue	III - IV	<i>Echinacea purpurea</i> 'Fatal Attraction'	dark crimson-pink	VII - VIII
<i>Salvia nemorosa</i> 'Marcus'	black-violet	VI - IX	<i>Geranium catafragmense</i> 'Cambridge'	dark pink	VI - VII
<i>Salvia nemorosa</i> 'Ostfriesland'	deep violet	VI/VII	<i>Geranium endressii</i>	pink	VI - X (XI)
<i>Salvia pratensis</i>	light to medium blue	V - VI	<i>Geranium endressii</i> varieties	dark pink	V - VII (IX)
<i>Scabiosa columbaria</i> 'Butterfly Blue'	blue-violet	V - IX	<i>Geranium gracile</i> 'Sarak'	violet pink	V - VII (IX)

## 11 Pink, carmine, magenta and crimson flower 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	Genus/species/variety	Flower colour	Flowering time
<i>Achillea millefolium</i> 'Cerise Queen'	carmine	VI - VII	<i>Origanum vulgare</i> 'Compactum'	violet-pink	VI - IX
<i>Allium aflatunense</i> 'Purple Sensation'	purple-violet	V - VI	<i>Paeonia lactiflora</i> 'Sarah Bernhardt'	light silvery pink	V - VI
<i>Anemone hupehensis</i> 'Ouvertüre'	light pink, carmine pink underneath	VII - IX	<i>Phlox paniculata</i> varieties	pink to carmine	VIII
<i>Anemone hupehensis</i> 'Septembercharme'	light pink-carmine	VIII - IX	<i>Phlox subulata</i> 'Temiskaming'	crimson-red	IV - V
<i>Anemone Japonica</i> hybrid 'Königin Charlotte'	violet-pink/semi-double flowers	VIII - X	<i>Polygonum affine</i> 'Darjeeling Red'	pink to crimson-pink	VI - IX
<i>Anemone Japonica</i> hybrid 'Prinz Heinrich'	crimson-red	IX - X	<i>Salvia verticillata</i> 'Purple Rain'	purple-violet	VI - IX
<i>Anemone tomentosa</i> 'Robustissima'	soft pink	VII - IX	<i>Sanguisorba officinalis</i> 'Tanna'	intense crimson	VI - VIII
<i>Antennaria dioica</i> 'Rubra'	pink-red	V - VI	<i>Saxifraga urbium</i> 'Elliott'	pink	V - VI
<i>Arabis arendsi</i> 'Compinkie'	light to dark pink	IV - V	<i>Scabiosa columbaria</i> 'Pink Mist'	violet-pink	V - IX
<i>Aster amellus</i> 'Lady Hindlip'	pink	VIII - IX	<i>Sedum spectabile</i> 'Carl'	dark pink	VIII - IX
<i>Aster Dumosus</i> hybrid 'Herbstgruß vom Bresserhof'	pink-red	IX - X	<i>Sedum spurium</i> 'Fuldaglut'	carmine	VII - VIII
<i>Aster Dumosus</i> hybrid 'Kassel'	carmine	IX - X	<i>Sedum telephium</i> 'Herbstfreude'	carmine-crimson to carmine-brown	IX - X
<i>Aster Dumosus</i> hybrid 'Wachsenburg'	violet-pink	IX - X	<i>Sedum telephium</i> 'Matrona'	pink to brownish pink	VIII - IX
<i>Astilbe arendsi</i> 'Fanal'	ruby red	VII	<i>Tellima grandiflora</i>	greenish pink	V - VI
<i>Astilbe chinensis</i> pumila	violet-pink	VIII - IX	<i>Teucrium lucidrys</i>	crimson-pink	V - X
<i>Astilbe chinensis</i> taquetii 'Purpurlanze'	crimson-red	VII - VIII	<i>Thalictrum aquilegiifolium</i>	violet-pink	V - VI
<i>Astilbe Glaberrima</i> hybrid 'Sprite'	pearl pink, later greyish pink	VII - VIII	<i>Thymus doerfleri</i> 'Bressingham Seedling'	pink	V - VI
<i>Astrantia major</i> 'Roma'	silvery pink to antique pink, pearly	VI - VII	<i>Thymus pulegioides</i>	purple-violet	VI - VIII
			<i>Thymus serpyllum</i>	light-purple pink	VI - VIII

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





## White and grey perennials 12

Genus/species/variety	Flower colour	Flowering time	Genus/species/variety	Flower colour	Flowering time
<i>Thymus serpyllum 'Coccineus'</i>	crimson-red	VI - VIII	<i>Epimedium youngianum 'Niveum'</i>	pale white	IV - V
<b>Aquatic plants</b>			<i>Eupatorium rugosum 'Chocolate'</i>	pure white	VII - IX
<i>Butomus umbellatus</i>	pink	VII - IX	<i>Filipendula ulmaria</i>	cream-white	VI - X
<i>Nymphaea hybrid 'James Brydon'</i>	carmine	VI - VIII	<i>Fragaria vesca semperflorens</i> varieties	white	V - IX
<i>Nymphaea odorata 'Rosennymphe'</i>	intense pink, light pink	VI - VIII	<i>Fragaria vesca vesca</i>	white	IV - V
			<i>Galium odoratum</i>	white	IV - V
			<i>Geranium catarigriense 'Biokovo'</i>	white with pink shimmer	VI - VII
			<i>Geranium clarkei 'Kashmir White'</i>	white with brown-pink veins	VI - VII
			<i>Geranium macrorrhizum 'Spessart'</i>	white with light pink	V - VI
			<i>Geranium macrorrhizum 'White Ness'</i>	pure white	V - VII
			<i>Geranium renardii</i>	grey-white with violet veins	VI - VII
			<i>Geranium phaeum 'Album'</i>	pure white	V - VII
			<i>Geranium sylvaticum 'Album'</i>	pure white	VI - VII
			<i>Helianthemum cultorum 'Snow Queen'</i>	white	V - IX
			<i>Helleborus niger</i>	milky white with a green shimmer	XII - II
			<i>Helleborus Orientalis hybrid</i>		
			'White Spotted Lady'	white with red dots	II - IV
			<i>Hosta 'Royal Standard'</i>	milky white	VII - VIII
			<i>Iberis sempervirens</i> varieties	bright white	VI - VII
			<i>Leucanthemum vulgare 'Mäikönigin'</i>	milky white	V
			<i>Liatris spicata 'Floristan Weiß'</i>	white	VII - IX
			<i>Lysimachia clethroides</i>	white	VII - IX
			<i>Lychnis coronaria 'Alba'</i>	white	VI - VII
			<i>Macleaya cordata</i>	creme-white, brown shimmer	VII - VIII
			<i>Matricaria caucasica</i>	white	V - VI
			<i>Nepeta faassenii 'Alba'</i>	delicate white	V - VIII
<i>Achillea ptarmica 'Boule de Neige'</i>	white	VII - IX	<i>Omphalodes verna 'Alba'</i>	white	III - V
<i>Aconogonon speciosum 'Johanniswolke'</i>	creme-white	VI - VII	<i>Ophiopogon planiscapus 'Niger'</i>	white	VII - X
<i>Anaphalis triplinervis 'Sommerschnee'</i>	milky white	VI - VII	<i>Paeonia lactiflora 'Immaculée'</i>	pure white, creamy yellow in the centre	V - VI
<i>Anemone Japonica hybrid 'Honoreine Jobert'</i>	pure white	VIII - IX	<i>Phlox paniculata 'Kirmesländer'</i>	white with pink bud	VIII
<i>Anemone nemorosa</i>	white, light pink on the outside	III - IV	<i>Phlox paniculata 'Nymphenburg'</i>	white with ivory-white bud	VIII - IX
<i>Anemone sylvestris</i>	white	IV - VI	<i>Phlox paniculata 'Pax'</i>	pure white	VIII - IX
<i>Arabis caucasica 'Schneehaube'</i>	white	IV - V	<i>Phlox subulata 'White Delight'</i>	pure white	IV - V
<i>Arabis procurrens 'Glacier'</i>	white	IV - V	<i>Physalis alkekengi franchetii</i>	greenish cream-white	VI
<i>Artemisia schmidtiana 'Nana'</i>	grey-white	VII	<i>Polygonatum multiflorum</i>	greenish white	V - VI
<i>Aruncus aethusifolius</i>	milky white	V - VI	<i>Pulmonaria saccharata 'Sissinghurst White'</i>	pure white	IV - V
<i>Aruncus dioicus</i>	creme-white	VI - VII	<i>Rodgersia aesculifolia</i>	cream-white	VI - VII
<i>Aster divaricatus</i>	pale white	VIII - IX	<i>Sagina subulata</i>	white	VI - VII
<i>Aster Dumosus hybrid 'Schneekissen'</i>	white	IX - X	<i>Saxifraga urbium</i>	white, reddish stamens	V - VI
<i>Astilbe arendsi 'Brautschleier'</i>	white to creme-white	VII - VIII	<i>Sedum album 'Coral Carpet'</i>	white with pink shimmer	VI - VII
<i>Astrantia major</i>	silvery white with pink shimmer	VI - VII	<i>Sedum spurium 'Album Superbum'</i>	white	VII - VIII
<i>Campanula carpatica 'Weiße Clips'</i>	pure white	VI - VII	<i>Thymus serpyllum 'Albus'</i>	pure white	VI - VIII
<i>Campanula persicifolia 'Grandiflora Alba'</i>	pure white	VI - VII	<i>Tiarella cordifolia</i>	pale white with pink shimmer	V - VI
<i>Centranthus ruber 'Albus'</i>	white	VI - IX	<i>Viola sororia 'Albiflora'</i>	white	V - VI
<i>Ceratostium tomentosum 'Silberteppich'</i>	pale white	V - VI			
<i>Cimicifuga racemosa cordifolia</i>	creme-white	VIII - IX	<b>Grasses</b>		
<i>Cimicifuga ramosa 'Atropurpurea'</i>	white with pink shimmer	IX	<i>Cortaderia selloana</i>	silvery white	IX - X
<i>Cimicifuga simplex 'Brunette'</i>	whitish pink	VIII - IX	<i>Miscanthus sinensis</i> varieties	silvery	IX - X
<i>Convallaria majalis</i>	milky white	V	<i>Stipa pulcherrima</i>	silvery	V - VI
<i>Delphinium belladonna 'Casa Blanca'</i>	white	VI - VII/IX			
<i>Dianthus deltoides 'Alba'</i>	white with pink mottling	VI	<b>Aquatic plants</b>		
<i>Dicentra spectabilis 'Alba'</i>	pure white	V - VI	<i>Alisma plantago</i>	white to whitish pink	VI - IX
<i>Dryas suendermannii</i>	cream-white to light yellow	V - VI	<i>Nymphaea alba</i>	milky white	VI - VIII
<i>Echinacea purpurea 'Alba'</i>	white	VII - VIII	<i>Sagittaria sagittifolia</i>	white	VI - VIII
<i>Epimedium grandiflorum</i>	white, with a touch of pink-violet	IV - V	<i>Stratiotes aloides</i>	white	VI - VIII

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





## 13 Fragrant and aromatic perennials

A distinction is made between fragrance and aroma. Fragrances spread independently, whereas aromas are only created when plant parts are rubbed together. (See chart 14/Planning tips: Trees and shrubs/Fragrant and aromatic plants).

Genus/species/variety	Scent	Aroma
Achillea Filipendulina varieties	A	
Achillea millefolium varieties	A	
Achillea tomentosa 'Aurea'	A	
Aconogonon speciosum 'Johanniswolke'	(F)	
Agastache Rugosa hybrid 'Black Adder'®	F	
Alchemilla mollis	f	
Alyssum montanum varieties	F	a
Anemone sylvestris	f	
Arabis caucasica varieties	F	A
Artemisia schmidtiana 'Nana'		(A)
Asarum europaeum		a
Aster divaricatus	f	
Aster dumosus	f	(A)
Aster novae-angliae		(A)
Astilbe arendsi	f	
Astrantia major		a
Aubrieta cultorum	f	
Azorella trifurcata	F	
Brunnera macrophylla	f	A
Calamintha nepeta nepeta	f	A
Centranthus ruber	f	
Cerastium tomentosum 'Silberteppich'	f	
Cimicifuga racemosa cordifolia	f	
Cimicifuga ramosa 'Atropurpurea'	f	
Cimicifuga simplex 'Brunette'	F	
Convallaria majalis	F	a
Eupatorium fistulosum varieties	f	
Euphorbia cyparissias	F	
Filipendula ulmaria	f	A
Galium odoratum	f	A
Geranium macrorrhizum varieties		(A)
Geranium magnificum		a
Hemerocallis cultorum	f	
Hosta species and varieties	f/F	
Iris barbata varieties	f/F	
Lamium orvala	F	
Lavandula angustifolia varieties	F	A
Lysimachia punctata	f	a
Malva moschata	F	
Monarda fistulosa varieties	F	A

### Explanation of symbols:

- F = pleasant fragrance
- (F) = pungent, somewhat unpleasant scent (subjective)
- f = slightly fragrant (with one's nose directly in the flower)
- A = aromatic foliage
- (A) = very aromatic foliage
- a = slightly fragrant to aromatic foliage

Genus/species/variety	Scent	Aroma
Nepeta faassenii varieties		A(A)
Oenothera missouriensis	f	
Origanum species and varieties		A
Paeonia lactiflora (var.)	F	
Phlox divaricata 'Blue Moon'	F	
Phlox paniculata	F	
Phlox subulata	f	
Polemonium caeruleum	f	
Primula elatior	f	
Salvia nemorosa varieties		(A)
Santolina chamaecyparissus		a
Sedum telephium 'Herbstfreude'	f	
Tellima grandiflora	F	
Teucrium lucidrys		A
Thalictrum aquilegiforme	F	
Thymus species and varieties		A
Viola odorata 'Königin Charlotte'	F	

### Aquatic plants

Nuphar lutea	f
Nymphaea cultorum	f

## 14 Poisonous perennials

This overview of „poisonous plants“ serves as an orientation. It is not and cannot be complete, as our knowledge of the ingredients is in no way sufficient.

See preliminary remarks on the list „Poisonous woody plants“ - chart 18

Genus/species/variety	Poisonous plant part	Degree of poison	Taste/ note
All species of Aconitum	whole plant	+++	sweetish to spicy-hot
Alisma plantago	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 plants, roots	+	
All species of Epimedium	leaves	(+)	

Also see the preliminary remarks on the list "Poisonous plants"

### Explanation of symbols:

- +++ = extremely poisonous, select with caution
- ++ = very poisonous
- + = poisonous
- (+) = slightly poisonous





Genus/species/variety	Poisonous plant part	Degree of poison	Taste/note	Genus/species/variety	Autumn colours / Winter colours	Syncarpy
Eupatorium fistulosum	whole plant	+	aromatic-bitter	Coreopsis verticillata	green-yellow to bronze	
All species of Euphorbia	milky sap	++	spicy, bitter, causes great swelling partly phytotoxic	Epimedium perralderianum	winter bronze	
				Epimedium versicolor 'Sulphureum'	reddish	
				Euphorbia polychroma	yellow-orange	red stems
Galium odoratum	whole plant	(+)	nice scent, causes headaches	Filipendula ulmaria	yellowish	
All species of Helleborus	whole plant	+++	bitter and burning hot	Geranium macrorrhizum varieties	orange-yellow	
All species of Iberis	seeds, leaves	+	bitter	Geranium magnificum	orange	
Iris pseudacorus	rhizomes, leaves	+	burning hot	Geranium renardii	light yellow	
Lathyrus latifolius	seeds	+		Geranium sanguineum	brick to dark red	
Lupinus polyphyllus	seeds	++	bitter	Hemerocallis cultorum	yellow to yellow-green	
Macleaya cordata	milky sap	+		Heuchera micrantha 'Palace Purple'	blood-red	
Nuphar lutea	rhizomes, leaves	+		Hosta species and varieties	bright golden yellow	
All species of Nymphaea	whole plant	+	salty-bitter	Lysimachia clethroides	intense orange-red	
All species of Paeonia	flowers, seeds	+		Lysimachia punctata	yellowish	
Physalis alkekengi	whole plant	+	tangy-sour	Lythrum salicaria	bright blood-red	
Polygonatum multiflorum	berries	+	scratchy	Macleaya cordata	light yellow	loose syncarpy
All species of Pulsatilla	whole plant	+		Monarda fistulosa	yellow	stiff syncarpy
All species of Ranunculus	whole plant	+		Paeonia lactiflora	yellowish orange, sometimes pink	
All species of Trollius	whole plant	+		Polygonum affine varieties	bronze	
All species of Vinca	whole plant	+		Pulsatilla vulgaris	yellow	silvery syncarpy

## 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 and very 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 advise, 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 brick-red	
Aruncus dioicus	strong yellow	towering syncarpy
Aster divaricatus	pale yellow	
Astilbe arendsii	yellow	stiff brown syncarpy
Astrantia major	yellowish	
Bergenia species and varieties	winter metallic red-brown	
Ceratostigma plumbaginoides	orange-red (along with flowers)	
Convallaria majalis	yellow	

## Grasses

Calamagrostis acutiflora 'Karl Förster'	yellow	persistent fruit spikes
Calamagrostis arundinacea brachytricha	yellow	
Carex montana	yellow to orange-brown	
Cortaderia selloana		flower panicles in autumn
Festuca mairei		flower stalks in autumn
Melica ciliata	yellow	
Miscanthus giganteus	yellowish orange	inflorescences silvery violet
Miscanthus sinensis varieties	yellow	silvery syncarpy
Molinia species	bright yellow	transparent fruit panicles
Panicum virgatum 'Rehbraun'	orange-red to dark red	transparent fruit panicles
Pennisetum alopecuroides	straw-yellow	

## Ferns

Athyrium filix-femina	pale yellowish	
Dryopteris filix-mas	yellowish to brownish	
Matteuccia struthiopteris	yellowish	stiff, black-brown fruit fronds
Osmunda regalis	yellowish to yellow	
Polystichum setiferum varieties	yellowish to reddish	

## Aquatic plants

Phragmites australis	like straw	silvery fruit panicles
Typha angustifolia		red-brown 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.

<b>Genus/species/variety</b>	<b>Foliage</b>
<i>Acaena buchananii</i>	evergreen
<i>Achillea tomentosa 'Aurea'</i>	nearly evergreen
<i>Ajuga reptans</i> and varieties	nearly evergreen
<i>Alyssum saxatile 'Compactum'</i>	nearly evergreen
<i>Antennaria dioica 'Rubra'</i>	nearly evergreen
<i>Arabis cuacasica</i> varieties	nearly evergreen
<i>Arabis procurrens 'Glacier'</i>	nearly evergreen
<i>Asarum europaeum</i>	evergreen
<i>Aubrieta cultorum</i> varieties	(nearly) evergreen
<i>Azorella trifurcata</i>	nearly evergreen
<i>Bergenia</i> species and varieties	(nearly) evergreen
<i>Centranthus ruber</i>	nearly evergreen
<i>Cerastium tomentosum 'Silberteppich'</i>	(nearly) evergreen
<i>Dianthus carthusianorum</i>	nearly evergreen
<i>Dianthus plumarius</i>	nearly evergreen
<i>Dryas suendermannii</i>	(nearly) evergreen
<i>Epimedium perralderianum 'Frohnleiten'</i>	nearly evergreen
<i>Epimedium warleyense 'Orangenkönigin'</i>	nearly evergreen
<i>Euphorbia myrsinoides</i>	evergreen
<i>Fragaria vesca semperflorens</i> varieties	nearly evergreen
<i>Galium odoratum</i>	nearly evergreen
<i>Geranium endressii</i>	somewhat evergreen
<i>Helianthemum cultorum</i>	(nearly) evergreen
<i>Helleborus foetidus</i>	evergreen
<i>Helleborus niger</i>	nearly evergreen
<i>Heuchera Micrantha</i> hybrids	nearly evergreen
<i>Iberis sempervirens</i> varieties	evergreen
<i>Iris barbata</i>	nearly evergreen
<i>Kniphofia</i> hybrid	nearly evergreen
<i>Lamiastrum galeobdolon 'Florentinum'</i>	nearly evergreen
<i>Lamium maculatum</i>	somewhat evergreen
<i>Lavandula angustifolia</i>	evergreen
<i>Liriope muscari</i> varieties	winter- to evergreen
<i>Lychnis coronaria 'Alba'</i>	nearly evergreen
<i>Matricaria caucasica</i>	nearly evergreen
<i>Nepeta faassenii</i>	somewhat evergreen
<i>Ophiopogon planiscapus 'Niger'</i>	evergreen
<i>Pachysandra terminalis</i>	evergreen
<i>Phlomis russeliana</i>	nearly evergreen
<i>Phuopsis stylosa</i>	nearly evergreen
<i>Sagina subulata</i>	nearly evergreen
<i>Santolina chamaecyparissus</i>	winter- to evergreen

Genus/species/variety	Foliage
<i>Saxifraga umbium</i>	(nearly) evergreen
<i>Saxifraga umbium 'Elliott'</i>	(nearly) evergreen
<i>Sedum acre</i>	evergreen
<i>Sedum album</i>	evergreen
<i>Sedum hybridum 'Immergrünchen'</i>	(nearly) evergreen
<i>Sedum spurium 'Album Superbum'</i>	shoots nearly evergreen
<i>Stachys byzantine</i> in Sorten	nearly evergreen
<i>Teucrium lucidrys</i>	evergreen
<i>Thymus praecox pseudolanuginosus</i>	evergreen
<i>Veronica peduncularis 'Georgia Blue'</i> ®	nearly evergreen
<i>Veronica spicata incana</i>	nearly evergreen
<i>Waldsteinia ternata</i>	nearly evergreen
<i>Vinca</i> species and varieties	evergreen
<b>Grasses</b>	
<i>Ammophila arenaria</i>	nearly evergreen
<i>Carex caryophyllea</i> varieties	nearly evergreen
<i>Carex conica</i> 'Snowline'®	nearly evergreen
<i>Carex foliosissima</i> varieties	evergreen
<i>Carex grayi</i>	nearly evergreen
<i>Carex morrowii</i> 'Variegata'	evergreen
<i>Carex pendula</i>	evergreen
<i>Carex plantaginea</i>	evergreen
<i>Carex sylvatica</i>	evergreen
<i>Carex umbrosa</i>	evergreen
<i>Cortaderia selloana</i>	evergreen
<i>Deschampsia cespitosa</i>	nearly evergreen
<i>Festuca cinerea</i>	evergreen
<i>Festuca gautieri</i> varieties	winter- to evergreen
<i>Festuca mairei</i>	usually nearly evergreen
<i>Festuca ovina</i>	(nearly) evergreen
<i>Helictotrichon sempervirens</i>	evergreen
<i>Koeleria glauca</i>	nearly evergreen
<i>Leymus arenarius</i>	nearly evergreen
<i>Luzula sylvatica</i> varieties	evergreen
<i>Sesleria autumnalis</i>	nearly evergreen
<i>Sesleria caerulea</i>	nearly evergreen
<i>Sesleria heuffleriana</i>	nearly evergreen
<i>Stipa gigantea</i>	nearly evergreen
<b>Ferns</b>	
<i>Blechnum spicant</i>	nearly evergreen
<i>Dryopteris erythrosora</i>	nearly evergreen
<i>Phyllitis scolopendrium</i>	evergreen
<i>Polystichum aculeatum</i>	nearly evergreen
<i>Polystichum setiferum</i>	usually nearly evergreen



## 17 Colourful perennials

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
-----------------------	--------

### Blue to blue-green foliage

<i>Dianthus plumarius</i>	silvery blue
<i>Euphorbia myrsinifolia</i>	blue-green
<i>Hosta sieboldiana 'Elegans'</i>	steel blue
<i>Hosta sieboldiana 'Frances Williams'</i>	grey-blue with yellow edge
<i>Hosta Tardiflora hybrid 'Halcyon'</i>	intense pale blue
<i>Hypericum polypodium</i>	grey-blue
<i>Lychis coronaria 'Alba'</i>	silvery grey-green, tomentose
<i>Macleaya cordata</i>	blue-green to steel-blue
<i>Sedum telephium 'Herbstfreude'</i>	pale blue to blue-green
<i>Stachys byzantina 'Big Ears'</i>	silvery grey-green, tomentose
<i>Thymus praecox pseudolanuginosus</i>	grey leaves, woolly

### Grasses

<i>Ammophila arenaria</i>	blue-green
<i>Carex foliosissima</i> varieties	white yellow
<i>Festuca cinerea</i>	blue to grey-blue
<i>Festuca cinerea 'Elijah Blue'</i>	intense steel-blue
<i>Helictotrichon sempervirens</i>	steel-blue
<i>Koeleria glauca</i>	grey-blue-green
<i>Leymus arenarius</i>	silvery-blue-green
<i>Sesleria caerulea</i>	grey-blue
<i>Stipa tenuissima</i>	grey-green

### Yellow foliage

<i>Hosta fortunei 'Aureo-marginata'</i>
<i>Hosta hybrid 'Sum and Substance'</i>

### Grasses

<i>Scirpus tabernaemontanii</i>
<i>Hakonechloa macra 'Aureola'</i>

### Red and brown foliage

<i>Acaena microphylla</i>
<i>Acaena microphylla 'Kupferfeppich'</i>
<i>Ajuga reptans 'Atropurpurea'</i>
<i>Aruncus aethusifolius</i>
<i>Ceratostigma plumbaginoides</i>
<i>Cimicifuga ramosa 'Atropurpurea'</i>
<i>Cimicifuga simplex 'Brunette'</i>
<i>Eupatorium rugosum 'Chocolate'</i>
<i>Euphorbia amygdaloides</i> varieties
<i>Geranium macrorrhizum</i> varieties

Genus/species/variety	Colour
<i>Geranium magnificum</i>	brick-red in autumn
<i>Sedum telephium 'Matrona'</i>	brown
<i>Heuchera micrantha 'Palace Purple'</i>	black-red
<i>Heuchera Micrantha hybrid 'Obsidian'</i>	deep dark red, non fading
<i>Heuchera Micrantha hybrid 'Plum Pudding'</i>	plum, with silvery highlights
<i>Lythrum salicaria</i>	brick to blood-red in autumn
<i>Ophiopogon planiscapus 'Niger'</i>	dark- to black-green
<i>Paeonia lactiflora</i> varieties	shoots dark red
<i>Sedum album 'Coral Carpet'</i>	brick to coral red
<i>Sedum hybride 'Immergrünchen'</i>	leaves brick-red in winter
<i>Sedum spurium 'Fuldaglut'</i>	bronze-red
<i>Sedum telephium 'Matrona'</i>	brown
<i>Viola labradorica</i>	reddish
<b>Grasses</b>	
<i>Carex conica 'Snowline'</i> ®	dark green with striking white edge
<i>Imperata cylindrica 'Red Baron'</i>	red-green
<i>Panicum virgatum</i> varieties	early red autumn colouring
<b>White, silvery and silvery grey foliage</b>	
<i>Achillea</i> species	shoots silvery, then grey-green
<i>Alyssum montanum 'Berggold'</i>	silvery to grey-green
<i>Alyssum saxatile 'Compactum'</i>	silvery tomentose, then light grey
<i>Anaphalis triplinervis 'Sommerschnee'</i>	silvery white, then pale grey
<i>Antennaria dioica 'Rubra'</i>	silvery, then grey-green
<i>Artemisia ludoviciana 'Silver Queen'</i>	bright silvery white, then grey
<i>Artemisia schmidtiana 'Nana'</i>	silky silvery grey
<i>Artemisia stelleriana</i>	bright silvery grey
<i>Brunnera macrophylla 'Jack Frost'</i> ®	silverywhite, variegated
<i>Cerastium tomentosum 'Silberteppich'</i>	bright silvery, then grey-white
<i>Geranium renardii</i>	velvety grey, then grey-green
<i>Gypsophila paniculata 'Schneeflocke'</i>	grey to grey-green
<i>Helianthemum cultorum 'Snow Queen'</i>	silvery grey
<i>Hosta crispula</i>	green leaves with white margin
<i>Lamiastrum galeobdolon 'Florentinum'</i>	pale green, silvery spots
<i>Lamium maculatum</i> species	slender to large white spots
<i>Lavandula angustifolia</i> species	silvery grey when shooting, grey
<i>Nepeta faassenii</i> and species	pale grey to grey-green
<i>Potentilla aurea</i>	leaf green on top, silvery underneath
<i>Pulmonaria saccharata</i> varieties	leaves with pale white spots
<i>Pulsatilla vulgaris</i>	grey, silvery synapry
<i>Santolina chamaecyparissus</i>	silvery grey
<i>Stachys byzantina</i>	velvety silver
<i>Verbascum olympicum</i>	velvety silver
<i>Veronica spicata incana</i>	flourish white, then silvery 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 as 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	Genus/species/variety	Means of propagation
<i>Acaena buchananii</i>	runners, layers	<b>Grasses</b>	
<i>Acaena microphylla</i>	runners, layers	<i>Ammophila arenaria</i>	runners
<i>Achillea ptarmica 'Boule de Neige'</i>	runners	<i>Carex pendula</i>	seed
<i>Ajuga reptans</i> varieties	layers	<i>Leymus arenarius</i>	runners
<i>Anemone sylvestris</i>	runners	<i>Luzula sylvatica</i>	runners
<i>Aquilegia vulgaris</i>	seed	<i>Melica ciliata</i>	seed
<i>Aruncus dioicus</i>	seed	<i>Stipa tenuissima</i>	seed
<i>Aster divaricatus</i>	runners		
<i>Astilbe chinensis taquetii 'Purpurlanze'</i>	runners		
<i>Astrantia major</i>	seed		
<i>Brunnera macrophylla</i>	seed		
<i>Buglossoides purpureo-caerulea</i>	layers		
<i>Campanula cochleariifolia 'Bavaria Blue'</i>	short runners, sowing		
<i>Campanula poscharskyana 'Blauranke'</i>	seed		
<i>Campanula rotundifolia 'Olympica'</i>	runners		
<i>Centaurea montana</i>	runners		
<i>Centranthus ruber</i>	seed		
<i>Cerastium tomentosum 'Silberteppich'</i>	runners, layers		
<i>Chrysogonium virginianum</i>	layers		
<i>Chelone obliqua</i>	runners		
<i>Convallaria majalis</i>	runners		
<i>Corydalis lutea</i>	seed		
<i>Filipendula ulmaria</i>	runners, seed		
<i>Fragaria vesca semperflorens</i> varieties	runners		
<i>Geranium nodosum</i>	runners		
<i>Geranium phaeum</i>	runners		
<i>Geranium sanguineum</i>	runners, layers, seed		
<i>Lamiastrum galeobdolon 'Florentinum'</i>	layers		
<i>Liriope muscari</i> varieties	seed		
<i>Lysimachia clethroides</i>	runners		
<i>Lysimachia punctata</i>	runners, seed		
<i>Lythrum salicaria</i>	seed		
<i>Malva moschata</i>	seed		
<i>Nepeta faassenii</i>	seed		
<i>Omphalodes verna</i>	layers		
<i>Polygonum affine 'Darjeeling Red'</i>	layers		
<i>Sedum spurium 'Album Superbum'</i>	layers		
<i>Stachys byzantina</i>	layers		
<i>Sympetrum azureum</i>	runners, seed		
<i>Sympetrum grandiflorum</i>	runners, layers		
<i>Tellima grandiflora</i>	seed		
<i>Viola odorata 'Königin Charlotte'</i>	runners		

