

## Adorning Outdoor Spaces with Winter Annuals

(\* Rakesh Kumar, Rajesh Kumar Pandey, Sheetal Dogra and Ali Haider Shah)

**Division of Floriculture & Landscaping, Faculty of Horticulture & Forestry, Sher-e-Kashmir University of Ag. Sciences and Tech. of Jammu, Chatha, Jammu (J&K)**

\*Corresponding Author's email: [rakeshkashav53@gmail.com](mailto:rakeshkashav53@gmail.com)

Ornamental annuals are the herbaceous plants that grow from seeds, produce flowers, set seeds, and complete their life cycle within one growing season of the year, having a short period of the lifespan. Ornamental annuals are classified on the basis of season as summer season annuals, rainy season annuals and winter season annuals. During summer and rainy season, the annuals are limited in number. However, during winter season, there are plenty of annuals available for beautification of places and our surroundings. Winter flowering annuals serve as essential components in any landscape plan. These annuals can be planted as bedding plants, garden plants, plants for rockery, window basket, cut flowers, loose flowers and herbaceous border in gardens. Some of the most common winter season annuals are described below:

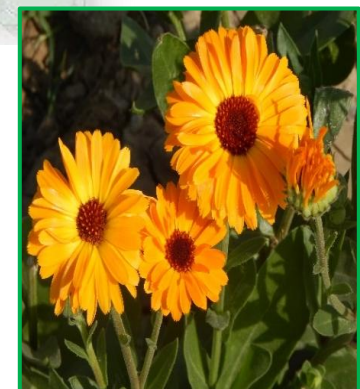
### Brachycome

It is also known as swan river daisy and belongs to family compositae. The plant is half hardy, bears thin leaves and daisy like flowers. Flower stalks are very delicate and these are likely to bend or break down during winds. It is grown in winter season in open field with medium or light soil. It prefers well-drained, rich, and moist soil for optimum growth. It needs full sun to partial shade, requiring at least six hours of sunlight daily to promote healthy growth and abundant flowering. It is generally grown as edging plant and in rockery. Seeds should be sown directly in the field and later thinning can be done. Seeds are sown during September- October in plains and in month of February-March in Hills.



### Calendula

It is popularly known as pot marigold. It is one of the most popular annuals due to its hardy nature. Plant grows upto 30-60 cm height. It bears yellow and orange-coloured flowers. It is widely cultivated and can be grown easily in sunny locations in diverse range of soil types. Seed are sown during September-October. The seedlings are transplanted after four weeks in pots or in beds. It is generally grown in beds, border planting, edging, rockery and pot plant. It is frost tolerant and somewhat cold hardy and add long-lasting color and beauty in a flower bed or container. Its florets are edible. They are often used to add color to salads or added to dishes as a garnish in lieu of saffron.



## Dahlia

Dahlia is one among the most important garden plants. It belongs to the family Asteraceae. The leaves, with slightly serrated margins, are produced opposite at each node on the stem. Large variations in colour, sizes, shapes and forms of its flowers coupled with profusion of flowering and easy cultivation has made them immensely popular. Dahlias are half hardy herbaceous perennial with tuberous roots as its storage organ. Stems of dahlia are mostly erect, branched and glabrous. They bear flowers on a long, stiff stem well above the foliage. Dahlias are propagated by seeds, tuberous roots and cuttings. But seed raised plants generally do not come out to be true-to-type. Therefore, plants are raised by cuttings. The cuttings are taken from the young green shoots produced from the crown of the tubers, when they are about 7.5 to 10 cm in length. The shoots should be cut as close to the crown as possible. The lower leaves in the cuttings may be removed by clipping and the cut end is rooted with the help of growth regulators. The cuttings are placed 5 cm apart in shallow boxes or pans containing a porous mixture of coarse soil and leaf mould. Cuttings take about 6 weeks to root. Another method of raising true-to-type dahlia is by division of old tuberous roots. But it should be kept in mind that each tuberous root should contain a small portion of the crown. In the hills, tuberous roots/cuttings are transplanted in the final beds in March - April and in plains during June - July.



## Gaillardia

It is popularly known as blanket flower. It is one of the hardiest annuals and can be grown during summer, rainy as well as in winters season, in areas where winters are not that much severe. It bears very attractive bright yellow purple, cream yellow or orange, scarlet, copper or bronze coloured flowers. It needs full sun shine for bright display and does not tolerate shade. The seeds are sown in the month of June to October and February for propagation in monsoon, winter or summer respectively. In hills, seeds are sown during March -April. It is grown as bedding plant, herbaceous border, mass planting and as loose flower.



## Hollyhock

It belongs to malvaceae family. It is very vigorous flowering annual reaching upto height more than 150 cm. It bears single, semi-double or double large flowers having white, pink, salmon, maroon and yellow colours. It is generally grown as winter season annual, however in moderate climatic conditions, it can be grown round the year. In Hills, it is grown during summer season. Its seeds are bold and therefore, it can be sown directly in pots and in soil to avoid transplanting shock. It is planted at a spacing of 45-60 cm. It is grown in rear of herbaceous border. It acts as a colourful screen.



## Ice Plant

It is one of the nature's most beautiful plants. It is a very dwarf almost trailing herb-like plant and rather compact in growth. The branches and leaves

are succulent. The flowers open in the morning and closes in the evening. The flowers are deep pink, pink or white in colour with a prominent eye in the centre. Sandy, sandy loam or gravelly soils are best suited for its cultivation. Seeds are sown in September-October in plains and in month of March-April in Hills. As seeds are very fine, so generally mixed with sand for uniform sowing. It can be planted in flat beds to create mass effect, as edging plant and pot plant.



### Marigold

It is one the most hardy and easiest to grow flowering annual. The plant height varies from 30-90 cm depending on species and their varieties. The leaves are deeply cut, dark green and attractive. The flowers are mostly bright or dark yellow orange, near white or even red. It can be grown as summer season, rainy season and winter season annual. Seeds are sown in pots, nursery beds or seed pans. Seedling are transplanted after one month at a spacing of 45x45 cm. It is grown as loose flower, religious offerings, garland making, rangoli, extraction of carotenoid pigments, herbal colours, as edge plant and in rockery.



### Nasturtium

It is popularly known as garden nasturtium, nasturtium, Indian cress or monk's cress. It is a species of flowering plant in the family Tropaeolaceae, It is a fast-growing plant, with trailing stems growing to 0.9–1.8 m. The flowers are 2.5–6 cm in diameter, mildly scented, with five petals, and vary from yellow to orange to red, frilled and often darker at the base of the petals. Nasturtiums perform best in full sun, in average, slightly acidic, well-drained soils. The fruit is 2 cm broad, three-segmented, each segment with a single large seed 1–1.5 cm long. Nasturtiums do equally well in containers and in garden beds.



### Petunia

Petunia (*Petunia x hybrida*) is a member of the Solanaceae family. Petunia is a famous flower due to its beautiful multi-colored trumpet-shaped flowers. It has a spreading habit with long, trailing branches. Its foliage is hairy and branching. The plant prefers sunny areas to grow. It is very hardy and well adapted to various types of soils and moisture conditions. Seeds are sown during October-November in plains and during Feb.-March in Hills. The tubular flowers have five petals joined at the mouth in a shape resembling a small trumpet. It can be grown in pots, window boxes, baskets, edging plant, herbaceous border.



### Pansy

It is a perennial winter annual with trailing habit. It is one of the most popular annual due to its extremely pretty, unusual and colourful form of flowers. A cool climate favours good size and colour of flowers. A well-drained, sandy loam soil rich in organic matter, loose and friable are good for its growth and flowering. The flower colour is white, yellow and blue. Seeds are sown during September-October. The seeds are sown in seed pans or nursery beds. The seedlings are transplanted at 4 leaf stage at a distance of 15-25 cm. The flowering starts 3.5-4 months after transplanting. It is grown as edging plant, in rockery, hanging baskets, flat pots and window boxes.



### Poppy

Also known as garden poppy or shirley poppy, belongs to the family papaveraceae. It grows to a height of 50 to 60 cm with large cup shaped, single or double flowers with crinkled silken petals borne on long slender stems. It thrives in full sunlight, which should be at least 6 hours. It grows in most soils, but for the best results it needs well-drained soil with full sun. They thrive even in alkaline, acid or neutral soils. The flower colours are white, pink, rose, slaty blue, apricot, terracotta, salmon, scarlet, pale mauve, blue or dark maroon with a white base and in many the edges have a contrasting colour (picotee-edged).



### Phlox

It is hardy winter season annual growing upto a height of 45-60 cm. Leaves are medium sized, narrow and pointed, thickest on the basal end of the branches getting smaller towards the flowering end. Flowers are attached to branches in large clumps covering the entire plant. Flower colour is white, pale yellow, rose, pink, red, purple, blue, violet and their varied intensities with dots in nature. Seeds are sown from September-October, whereas in hills, sowing generally done from March-April. Seedlings are transplanted 1 month after sowing at a spacing of 25x25 cm. Flowering starts about three months after transplanting. It is grown alone, in mixed colours, or in mixed herbaceous flower border, edge plant, in pots, baskets or window boxes.



### Sweet Alyssum

It belongs to cruciferae family. It is a dwarf hardy plant and grows upto 80 cm in height. Leaves are tiny, narrow and light green. It bears small, white, pale -lilac or yellow coloured fragrant flowers. It is grown as winter season annual; seeds are sown in nursery in the month of September-October in plains and during February-March in hills. Seeds are very fine and therefore sown in nursery beds and transplanting is done after 1 month. It is suitable for edging, rockery and in pots.



### Snapdragon

It is also known as dog flower. It belongs to family scrophulariaceae. The plant height varies from 15-90 cm. The plant has thin branches, leaves are smooth with entire margins. The flowers are borne on spikes. The flower colour varies from white to shades of light pink, rose, salmon, deep and pale yellow, red and maroon. The seeds are very small, so seeds are generally mixed with fine sand for even distribution. Seeds are generally sown in the month of September-October in plains and February-March in hills. It is mostly grown during winters. Seedlings are transplanted after 4 weeks of sowing. It is grown as edging plant, herbaceous border, mass planting and even as cut flower.



### Strawflower

It is also known as Paper Flower and Everlasting Flower. It is a flowering annual in the family asteraceae and native to Australia. The plants are about 75- 90 cm tall with oblong pointed leaves. Flowers are about 7 cm and more across, with petals clustered and incurved towards the centre disc, when these are half open. Flower colour ranges from yellow, orange, pink, deep rose, red, wine, magenta, purple to white. Seeds are sown in month of September - October in plains and seedlings are transplanted later into beds after about a month of sowing. In the hills, sowing can be done in March - April. Sowing of seeds should be done in well-drained, disease-free germination medium having a pH of 5.8-6.2.



The optimum temperature for seed germination is 21-22°C. It is used worldwide as fresh and dried flower, which retains the color for a longer time. The dwarf cultivars can be used as bedding plant.

### Sweet William

It is closely related to carnation and belongs to family caryophyllaceae. It is an herbaceous plant with erect stems, but spreading well at the top. It is considered as a biennial but grows in the plains as an annual. The plants are medium (30-45 cm) in height. It has angular stems, short, pointed-broad leaves and the flowers grow up on top of the branches, many a time, forming a compact attractive, colourful cluster. The individual flowers having one or many colours, may be single or double with very finely cut petals. Its flowers may be of various pleasing colours ranging from white to red, scarlet, pink, lilac, violet, maroon, black and mauve. The flowers may be self-coloured, zoned, starred, mottled or with clear white eyes. Seeds are sown in pans or nursery beds in September-October in the N-Indian plains and seedlings are transplanted after about a month of sowing. However, in hills, seeds are sown from August to October and in February to March. Seeds germinate in 7 to 10 days.



### Sweet Sultan

It is a sweet scented annual belongs to family asteraceae. The plant is having straight growth and less branching habit. It is tall growing (90 cm), with toothed leaves and fragrant flowers of white, mauve, violet pink, bright red, reddish - violet, purple and yellow colours. The yellow flowered variety produces small - sized flowers. The flowers are born on long stems. The seeds are sown either in nursery beds for transplanting seedlings later or *in-situ*. In the plains, sowing is generally done during month of September – October. However, in the hills sowing is done during March - April or August - October.



### Sweet Pea

It is one of the most popular garden annuals grown for its very attractive and fragrant flowers. It belongs to family papilionaceae. It is an annual herb with trailing habit attaining a height from 30 cm to almost 2.0 m. The flat rough stem is slightly hairy. It produces very thin long leaves with stipules and a pair of long narrow pointed leaflets ending in tendrils. It produces flowers of different colours like; white, rose, pink, scarlet, crimson, cream, salmon, lavender, bluish and mauve to orange and exhaustive combinations of these hues. Seeds are bold resembling that of pea seeds. Seeds are dibbled directly into well prepared field. The best time of sowing is during September to October in the hills and February - March in the plains. Though, spacing depends upon the type or variety, 15 to 30 cm spacing would be adequate for almost all varieties. The ideal depth of sowing is about 3 cm. When grown in clumps, the seeds should be sown in circles at a distance of 15-22 cm and not more than 5-6 plants should be grown at each clump. Seeds take about 7- 10 days for germination.

