## Lecture II: Cultivation of Annuals

Annuals are plants that complete their life cycle in one season or one year. They attain their full growth from seed, flower and die in one year or one season.

## Classification

- Bedding purpose: Dahlia, Marigold, Phlox, Verbena, Pansy, Carnation, Petunia, Zinnia, Portulaca, Gomphrena, Gaillardia.
- Fragrant flowers: Carnation, Sweet pea, Sweet Alyssum, Sweet William, Stock
- Cut flowers: Carnation, Aster, Antirrhinum, Stock, Gypsophila, Coreopsis
- Loose flowers: Marigold, Gomphrena, Aster, Zinnia, Gaillardia, Paper Flower, Dahlia
- Cut Greens: Kochia, Amaranthus, Coleus, Quamoclit
- Hanging basket: Daisy, Nasturtium, Verbena, Phlox, Sweet Alyssum, Portulaca
- Rock garden: Nasturtium, Verbana, Phlox , Ice Plant, Stock, Venidium
- Screening: Hollyhock, Sweet pea, Kochia, Moon Flower, Ipomoea
- Pot plants: Carnation, Antirrhinum, Aster, Petunia
- Dry flowers: Helichrysum, Gomphrena
- Shade loving: Salvia, Cineraria, Clarkia, Verbena, Delphinums
- Edging: Ageratum, Marigold, Portulaca, Pansy, Phlox, Candytuft
- Long lasting flowers: Calendula, Paper flower, Amaranthus, Nasturtium, Gomphrena
- Short day: Amaranthus, Salvia, Cosmos, Salvia
- Log day: Carnation, Petunia, Antirrhinum, Rudbeckia
- Day neutral: Gompherin, Impatiens
- Seed germination only in night:Nicotiana, Lobelia, Echium
- Seed germination only in dark: Nigella, Phlox, Amaranthus, Allium
- Winter season: Sown during September-October
- Summer season: Sown during Feb- March (Kochia, Gaillardia, Cosmos, Sunflower, Zinnea)
- Rainy season: Sown during June-July (Amaranthus. Balsam, Celosia, Gomphrena)

IMPORTANCE OF ANNUALS IN LANDSCAPE GARDENING

- They are easily grown plants due to their short life cycle.
- These plants vary widely in form, growth habit, flower colour, size, shape and season of flowering.
- These plants bear profuse flowering in a short period of time.
- They are used primarily to brighten the landscape with abundant amounts of color.
- Seasonal flowers can be an excellent source of colour and variety for enriching any surroundings including a garden environment.
- They bring a change in outlook of garden with the changing season.
- They beautify the surroundings and exhibit a good show of blooms at low cost and labour.
- They cover the entire place within a short span of time.
- The planting of seasonal in the border of a plot becomes a site of attraction in the garden.
- These plants provide mass effect in the garden using different colour schemes.
- These plants produce a huge amount of seeds within a short period of time.
- These plants are grown for various situations and purposes in the garden like for pots, hanging baskets, bed, edging, rock garden, as herbaceous border or in shrubberies ,shady situations etc.

Table1: Description of annual flowers

| Botanical name | Common Name | Family | Remarks |
| :---: | :---: | :---: | :---: |
| A. Rainy and summer season annuals |  |  |  |
| Amaranthus sp. | Joseph's coat | Amaranthaceae | Beds \& borders |
| Celosia argentea | Cock's comb | Amaranthaceae | Dry flower arrangement |
| Gaillardia pulchella | Blanket flower | Asteraceae | Bedding, border and cutting |
| Gomphrena globosa | Globe Amaranth | Amaranthaceae | A long summer to frost bloom |
| Helianthus annus | Sunflower | Asteraceae | Suitable for containers |
| Impatiens balsamina | Touch-me-not | Balsaminaceae | Border and potted plant |
| Kochia scoparia | Kochia | Chenopodiaceae | Foliage annual |
| Portulaca grandifiora | Sun plant | Portulacaceae | Trailing stem, Edge plant |
| Tithonia rotundifolia | Mexican Sunflower | Asteraceae | Taller types good for background |
| Zinnia elegans | Zinnia | Asteraceae | Riverside Beauty |
| B. Winter season annuals |  |  |  |
| Abronia umbellate | Sand- verbena | Nyctaginaceae | Rosy lilac, sweet scented in night |
| Acroclinium roseum | Paper flower | Asteraceae | $45-60 \mathrm{~cm}$ tall, double daisy like |
| Adonis aestivalis | Pheasant's Eye | Ranunculaceae | Suitable for mixed borders |
| Ageratum houstonianum | Floss Flower | Asteraceae | Colourful powder-puff like flowers |
| Agrostemma githago | Corn Cockle | Caryophyllaceae | Cut flowers, mixed borders, pots |
| Althacea rosea | Hollyhock | Malvaceae | Screens and as annual borders |
| Alyssum maritimum | Sweet Alyssum | Brassicaceae | Beds, borders, hanging baskets |
| Anchusa capensis | Alkanet Bugloss | Boraginaceae | Blue Bird |
| Antirrhinum majus | Snapdragon | Snapdragon | Bedding, pot, edges and borders |
| Arctosis grandis | African daisy | Asteraceae | Used for daytime decoration |
| Baetonia aurea | Blazing Star | Losasaceae | Bedding plants |
| Bellis perennis | Daisy | Asteraceae | Bedding edging , rock gardens. |


| Brachycome iberidifolia | Swan River daisy | Asteraceae | Pot, edges and cut flowers. |
| :---: | :---: | :---: | :---: |
| Cacalia coccinea | Tassel flower | Asteraceae | Cut flowers border or bedding |
| Calendula officinalis | Pot Marigold | Asteraceae | 'Indian Prince' \& 'Jane Harmony' |
| Centanria cyanus | Cornflower | Asteraceae | Grey-green branched stems |
| Centnaria moschata | Sweet Sultan | Asteraceae | Look like powder puff |
| Chrysanthemum coronarium | Corn Marigold | Asteraceae | Annual chrysanthemum used in beds, pots mixed and annual borders |
| Clarkia elegans | Mountain garland | Onagraceae | Bedding and borders \& pot plant |
| Cleome spinose | Spider plant | Capparidaceae | Pink Queen and Helen Campbell |
| Clianthus dampieri | Sturt's Pea | Febaceae | Red Flag and Pink Boss |
| Coreopsis tinctoria | Tick seed | Asteraceae | Beds, background borders |
| Cosmos bipinnatus | Mexican Aster | Asteraceae | Beds and borders |
| Delphinium ajacis | Larkspur | Ranunculaceae | Border and pots |
| Dianthus barbatus | Sweet Williams | Caryophyllaceae | Mixed border, bedding \& Pot |
| Dimorphotheca sinuate | African daisy, Cape Marigold | Asteraceae | White colour flower |
| Eschscholzia californica | Californian poppy | Papaveraceae | edging along walks, borders, rock gardens |
| Gazania splendens | Treasure flower | Asteraceae | Rock garden, border amd edging |
| Gypeophila elegans | Baby's Breath | Caryophyllaceae | Flowering pot plant |
| Helichrysum bracteatum | Strawflower | Asteraceae | Ornamental bracts |
| Iberis umbellate | Candytuft | Brassicaceae | Sweetly scented flowers |
| Laythyrus odoratus | Sweet pea | Sweet Pea | Open sunny situation |
| Petunia sp . | Petunia | Solanacea | Hanging basket |


| Phlox drummondii | Star flower | Polemoniacaea | Suited for bed and pots |
| :--- | :--- | :--- | :--- |
| Papaver sp. | Poppy | Papavaraceae | Suitable for high altitude |
| Salvia splendese | Sage flower | Lamiaceae | Beds and borders |
| Senecio cruentus | Cineraria | Asteraceae | Shady in nature |
| Torenia fournieri | Wish-borne <br> Flower | Scrophulariaceae | Container and border plant |
| Thunbergia alata | Black eyed Susan | Acanthaceae | Wide adaptability |
| Verbena hybrida | Verbena | Verbenacae | Trailing annual |

## REFERENCE

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