

LAWN

Lawn is a ground cover of perennial grass, which persists in close mowing and requires proper management practices

History of Lawn

- Egypt, China and Persia have features of prototypes of lawn since 13th century.
- Europe further helped in improvement of lawn.
- Carpet grass was mixed with flowering plants.
- Chamomile grass (*Anthemis* sp.) used in lawn during 11th to 13th century in U.K.
- Turf management is in use in France and England since 17th century.

Purposes of a lawn

- It is an important element in the garden.
- It leads to unity in garden design.
- It is a natural green carpet and is the carpeted floor of outdoor room.
- It is the heart of the garden and the centre for social life.
- It is the centre piece around which all other garden elements are placed in sub-ordinate order like the royal court, where king occupies the central position and is surrounded by his courtiers.
- It gives restful appearance to the eyes through its green outlook all the time.
- A lush green lawn is refreshing especially during summer.
- Lawn is the best foreground to enjoy the charm and beauty of the ornamental plants and features.
- Prevent soil erosion.

Characteristics of a lawn grass

- Look fresh and green throughout the year
- Not patchy
- Cold or drought resistant
- Free from attack of diseases and insects
- Quick growing
- Soft to touch
- Not giving fowl or bad odour

Cultivars of Bermuda grass (*Cynodon dactylon*)

- Calcuttia
- Hariyali
- *Cynodon dactylon* L. var. Bargusto
- *C. Dactylon* var. Panam, *C. dactylon* var. Panama



Korean grass(*Zoysia japonica*)



Cynodon dactylon

Site for planting lawn

- South, south-east or south-west open and sunny place for most part of the day with adequate water availability

Method of preparing soil for growing lawn

- Dig soil up to 45 cm depth and expose to sun in May-June.
- Turn soil 2-3 times, remove stones, rocks and break big clods.
- Spread 10-15 cm thick layer of well rotten weed free farm yard manure and thoroughly mix in soil.
- Irrigate the field thoroughly and allow all weeds to germinate.
- Remove all the weeds along with roots manually or spray non-selective type of herbicide like paraquat or gramaxone @ 1.0-1.5 litre per hectare in about 800-1000 litre water.

Ideal soil/ growing medium

- Sandy-loam, well fertile, drained with good water holding capacity having pH of 5-6 and sufficient humus or organic matter.

Leveling and grading of ground

- Level the soil for uniformity of growth throughout the entire area
- Do perfect grading for proper drainage i.e. one foot in every 50 feet
- Leveling is checked visually, flooding the area, stretching the rope and avenae level.

Methods of lawn raising

- Seeding
- Dibbling
- Plastering
- Sprinkling
- Turfing

Seeding method

- This method is common to grow cool season lawn grasses.
- About 25 Kg seed is mixed in 200-250 Kg sand or saw dust and is broadcasted evenly in the prepared field.
- Do light rolling
- Sprinkle water regularly until seedling emerges.
- Less labour is required, but lawn is not even.

Dibbling method

- A small bunch of grass along with roots and little stem is taken.
- Planting is done at a spacing of 10 cm apart both row to row and plant to plant.
- Do regular watering until establishment.
- Dibbling is done in June to September.
- Lawn developed by this method is quick, uniform and with more labour and cost.

Plastering method

- Grass roots with little stem of 4-5 cm long pieces are mixed with compost and farm yard manure.
- Spread this over prepared field during rainy season.
- Avoid heavy balling.
- Do liberal watering with sprayer

Sprinkling method

- Grass roots along with little stem are chopped into small pieces.
- Spread this over prepared field during rainy season.
- Do small raking to mix grass in soil.
- Do light rolling.
- Do liberal watering with sprayer.
- Do mowing after 70-80 days.

Turfing method

- Small pieces of well prepared lawn or turf are cut into square or rectangular shape preferably planted on polythene sheet.
- Fix these in a thoroughly prepared field.
- Do heavy rolling.
- Lawn prepared is clean and weed free.
- Quickest method of lawn raising.

Management of lawn

Mowing

- Mowing stimulates bud development.
- Shoots become thicker and roots shorter.
- Generally lawn height is maintained at 5-7 cm, as very close mowing results in weak growth and mowing at more height may not serve the purpose.
- In one mowing not more than 1/3rd leaves are removed.
- Remove stones or pebbles before mowing, so as to avoid any damage to shears of lawn mower.
- In most of the grasses mowing is done at fortnightly interval

Rolling

- Uniformity of growth is achieved by rolling, as it touches the nodes at ground, thereby keeping the area well leveled.
- Heavy rolling is done at the beginning of rainy season followed by light rolling in subsequent months depending upon grass species.

Manures and fertilizers

- Sun hemp is very good green manure before lawn planting.
- In a 30 m² lawn apply 3-5 q well rotten FYM, 10-20 kg lime and 10-20 kg SSP.
- Broadcast a mixture of 50-60g /m² or 1.5 Kg/ 30 m² (2 CAN: 1 SSP: 1 K₂ SO₄) twice in February-March and August-September.
- Spray of urea 0.3 per cent is also beneficial.

Irrigation

- Frequency and amount of irrigation depends upon soil, grass, weather and climate.
- It should be done before wilting or internal water stress.
- Increased watering interval result in deeper root development, thereby decreasing water requirement.
- Watering upto 5-15 cm depth at 8-10 days interval is ideal as frequent light watering is harmful.

Weeding

- Regular mowing checks weed growth by removing upper plant portion and starving of roots.
- For small area hand weeding is done.
- For controlling broad leaved weeds spray 2,4-D (0.05%).
- For narrow leaved weeds spray Atrazine @ 1.5 Kg a.i. per hectare in 1000 litre water.
- In lawn of Korean grass spray benefin or sylvex (0.1%).

Important diseases

Damping off, root rot, grey leaf mould, leaf spot, powdery mildew and fairy ring are important diseases of lawn.

- Spray Bordeaux mixture (4 : 4 : 50 :: Copper sulphate : lime : water) at fortnightly interval.
- Spray Dithane M. 45 (0.1%) + Bavistin (0.1%) at fortnightly interval.

Salient hints for maintaining healthy lawn

- ✓ Avoid water standing in rainy season.
- ✓ Remove all dead or dry leaves falling during autumn season.
- ✓ Do raking in lawn twice once before rains and second after rains.
- ✓ Do thinning as and when required
- ✓ Renovation of old or wild or weedy lawn
- ✓ Use notable herbicide to kill all weeds.
- ✓ Scrap lawn in rainy season.
- ✓ Do raking followed by leveling.
- ✓ Do testing of soil and add nutrients and lime as per requirement.
- ✓ Plant reliable grass.
- ✓ Apply proper manures and fertilizers.
- ✓ Broadcast sand, manures as per requirement.
- ✓ Maintain optimum moisture