

Rose growing on the Nilgiris

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Roses are largely grown in South India especially on the hill stations of the Nilgiris for pleasure as well as for prof. English roses, it is learnt were first introduced to the Nilgiris from England about the first quarter of the nineteenth century. Since then their spread on the hills has been rapid, with the result that every dwelling in the major areas of the hills has at least a couple of beautiful rose plants. From experience it has been found that among all places, the roses find a very congenial home in the Coonoor area, a place at an elevation of 5,500 feet to 6,000 feet in the Nilgiri Hill ranges.

Based mainly on the growth, habit, size, shape, colour and fragrance, the roses are distinctly grouped into definite types among which the more important types cultivated in South India are (1) Bourbon Roses, (2) Tea Roses, (3) Hybrid perpetuals, (4) Hybrid Tea Roses, (5) Noisette Roses, and (6) The Provence or Cabbage Roses.

1. **The Bourbon Roses:** These originate from the Isle of Bourbon and the common Edouard Rose which is the chief favourite of the plains belongs to this group. These are very hardy and vigorous growing types characterised by shiny rounded leaflets and profuse rose coloured blossoms, which are very fragrant and as a group most desirable for the constancy of their bloom as well as for their fragrance. These are easily propagated by layerings.

2. **The Tea Roses:** These deserve mention, not because they are so largely favoured in gardens, but because on them rests the Hybrid Tea Classes, which by far excels all others in present popularity. As a class these grow as tender bushes with branching and spreading habit producing larged sized flowers on lateral shoots characterised by thick petals in delicate shades of colour, and by the sweet smell akin to that emanating from a freshly opened tea chest. Though not continuous bloomers, these are free flowering. In the hill stations of South India the very popular varieties under this group are Lady Hillingdon, one of the few tea roses remaining in general cultivation and has long apricot yellow semi-double flowers borne on upright plants of moderate growth with unobtrusive bronze green foliage suitable for warm localities

Jean Ducher, a free flowering hardy variety bearing pink flowers on slender shoots with handsome foliage. withstands severe winter frosts.

Maman Cochet, is a vigorous growing variety bearing double globular flowers which are light pink with the outer petals splashed with bright rose. (A good variety for exhibition purposes.)

3. Hybrid Perpetuals: Roses of this group are extensively cultivated in the Continent and England for their continuous blooming, rare combination of colours and delicate fragrance. To evolve this group, perpetually flowering varieties which flower fairly throughout the year, were hybridised with selected varieties for colour etc. These are distinguished by their stiff upright growths with dull green wrinkled foliage and rather large, many petalled flowers which are of dark colours. Generally speaking they yield fewer blooms in the late summer and autumn months and have been outstripped in garden value by the newer Hybrid Tea Roses, which flower for a much longer period. Notwithstanding this, hybrid perpetuals elicit admiration, for they grow into strong vigorous bushes two feet or more in height with large handsome and generally fragrant blooms. In our country these behave as shy bloomers and are not popular, except on the hills.

Frau Karl Druschki, is one of the finest of all white roses, its high centred very double flowers being produced in profusion in April to June. Growth is vigorous and the plant has dark green mildew resistant foliage. Its only short coming is that it has no scent.

Hugh Dickson, is a vigorous grower with ample green foliage and fully double high centred flowers of good shape and intense crimson colour. The flowering is continuous and prolonged.

4. Hybrid Tea Roses: A group of roses much favoured by rosarians in India particularly on the hills for their multipurpose qualities. The massive size and gorgeous colour of the exhibition flowers, their utility as bedding roses for house decoration and button holes are unexcelled and thus there is not a single purpose demanded of the rose which the Hybrid Tea cannot supply. Flowers are more brilliantly coloured than in Tea Roses and are available in great diversity of colours. Considered as a class, these are the best for amateurs who can make a collection of several colours of them. These were created by crossing the Tea scented with the Hybrid perpetuals. These are characterised by and distinguished from the Hybrid perpetuals group by the deeper green foliage which are less wrinkled. Among this group the varieties mentioned below are best suited for the Hills.

General MacArther is an outstandingly good rose in shape as well as in colour. The deep scarlet flowers are fully double and are borne singly on short stems clad with deep green foliage.

Ophelia, is one of the best known of the all roses, and the parent of many exceptional varieties. The flowers are of perfect shape, double,

of pale salmon flesh, shaded with rose, and with an apricot centre, and are borne on long stiff stems. Growth is vigorous and erect with ample green foliage, which is sometimes susceptible to black spot.

Betty Uprichard, is a popular rose with large light green glossy foliage, strong growth, pointed buds, and large semi-double to double flowers of pale salmon pink with carmine reverse.

Shot Silk, is a moderately vigorous grower with erect branches and shining, glossy, deep green, mildew resistant foliage and bears medium sized salmon orange coloured flowers.

Dean Hole, a free flowering standard rose characterised by the numerous thorns on the stem bears large, double, full petalled silvery carmine flowers.

5. Noisette Roses: These climbing Roses are Hybrid of American origin, between China rose (*Rose chinensis*) and Musk Rose (*Rose moschata*). The chief characteristics are their free growth and continuous blooming with many flowered corymbs of sweetly scented flowers of white, pink, red or yellow. The well known Noisette roses on the hills are:

Marechal Niel; is one of the outstanding climbers in cultivation. The large fully double golden yellow flowers are of excellent shape. Growth is vigorous and foliage is of an attractive green colour.

Boule De Nieve is a vigorous climber with pale green foliage. It bears medium sized flowers of pure white colour.

6. The Provence or Cabbage Roses: These are sweet scented and pretty and the best of them is one named Bullata, popularly known as the Lettuce Leaved Cabbage Rose. These are distinguished by their broad, wrinkled, deeply serrate foliage which are bold and by the pendulous red flowers which are generally globular. These roses are not much favoured on the hills as well as in the plains due to their shy growth and poor flowering habits.

As already mentined the Hybrid Tea group has completely replaced all the other groups especially on the Nilgiri Hills. There are very many recognised varieties in this group. There are the hardy types like Columbia, President Herbert Hoover, General Mac Arthur, George Geary, Shot Silk, etc. which can be grown even at lower elevations, and delicate types like Golden Dawn, William Orr, E. G. Hill, Julien Potin etc.

Depending upon the height at which the plants are allowed to grow they can be further classified as bush, standard and half-standard types. The latter two are those that are grown on a rootstock after budding at a definite height of 18 to 24 inches in the case of the Standard types and to 15 to 18 inches in the case of the Half-Standard types. The bush types are usually grown from cutting of 6 to 8 inches from ground level.

Cultural Requirements: A deep rich and well drained loamy soil is ideal for roses, and in preparing beds the gardener should aim at improving his soil to this ideal condition. Very heavy clay soils can be improved by liming and the addition of sand girt and other opening materials. Places subject to high winds, frost and water stagnation are not suitable for this purpose.

Depending upon the space available, pits of 15" × 15" × 18" or better larger are dug at 2½ to 3 feet apart. Through initial preparation of the ground is absolutely essential, since the rose is going to stay on the ground for atleast ten years. The pits should be dug well and an abundance of farm yard manure, leaf mould, sand and soil mixed in equal proportions should be filled in. Though no chemical fertilisers are applied in this country, in other countries, especially England, at the time of preparing the beds, a mixture of 3 parts bone-meal and one part of sulphate of potash at 3 handfuls to a square yard is applied.

September, October are the ideal months when roses can best be planted under Nilgiri conditions. The plants are watered copiously but care should be taken to see that water does not stagnate. Inadequate watering too, will lead to the exposure of the surface roots, which will consequently result in the drying of the plants. Manuring is done once a year with the application of a basket of farm-yard manure and compost mixed in equal proportions, during the spring when the plants are dormant. The manure will then prevent the soil from drying out quickly during spells of hot weather, and the plant foods will be washed down to the roots when these are fully active.

Propagation: It is very well known all the world over, that superior roses are not always grown on their own roots, but 'worked', i. e. grafted or budded on suitable root-stocks. It has also been found that strong plants capable of giving the finest flowers with quick growth can be obtained by budding the superior roses on the wild stock, getting the full benefit of the strong roots of the briar. Every country has its own group of wild briar rose stocks, and on the Nilgiris, *Rosa indica*. Linn has been to be the most suitable briar stock for superior roses, by experience at the Sim's Park, Coonoor.

So the propagation of roses consists not only in the establishment of the briar cuttings, but also in the successful bud insertions of superior roses on such established briars. Trials at the Sim's Park, Coonoor, for over a period of three years in the rooting and establishment of the briar cuttings have revealed that a success ranging from 60 to 100% is obtained during the rainy months of July to December, with a maximum success of 100% during October and November.

Similar trials on budding of superior roses on briar stocks over a period of three years have consistently indicated that the months of April,

May and November have given the highest percentage of 'bud-take'. The results have also indicated the possibility of fairly successful bud insertions almost throughout the year under Coonoor conditions.

The usual practice is shield budding by the 'T' method. The briars are best planted in October–November and they become ready for budding by the following April–May and the plants begin to flower from the fourth month after budding.

The Bush roses as well as the Climbers are usually propagated by cuttings of the desired varieties of superior roses.

Pruning: The rose varieties that adorn the beds in gardens must all receive an annual pruning, if the best results are to be obtained from them. Hybrid Tea, Hybrid perpetuals and Hybrid Perennial roses require drastic pruning, while the others are usually given a light pruning. There are two schools in the art of rose pruning. One favours hard pruning and the other advocates long pruning. Though it is felt that long pruning produces plants with longer basal shoots it puts forth a poor spray of very inferior flowers, which are produced in abundance and in comparison with those from hard pruned bushes, they are miserable specimens. Hence only hard pruning is strongly advocated. Taylor (1945) maintains that hard or short pruning encourages growth and keeps the bushes in good condition. He further adds that short pruning maintains health and prevents debility and quotes instances of roses that have been hard pruned for over twenty years in good condition. McFarland and Pyle (1937) state that "pruning is not a thing to be afraid of, and that only by pruning hard can the grower expect to see handsome, brilliantly coloured flowers like those pictured in catalogues."

Hard pruning consists in removing all except three or four canes and cutting them back to 2 buds from the base. This is usually done for the roses on the Nilgiris during February to get the plants to peak bloom during April to June. The system of pruning that is usually practised on the Hills to the different types is given below :

1. *Newly planted plants:* The first pruning is usually severe and is done by removing all soft pithy growths, dead wood, and branches growing inwards and crowding the centre, leaving only four branches which are placed all round the plant to form a vase shape. Then these branches are cut back to two to three buds from the base leaving the top-most bud to be outwards so that the leading branches will continue to grow away from the centre without spoiling the shape of the plant.

In a few cases wherein the plant has not developed sufficiently and has only one branch, then this single branch is cut hard to develop two or three shoots from the eyes that are left, to form the future shape of the plant.

2. *Hybrid Tea Roses*: The dead and diseased shoots and cross limbs are first pruned off followed by the cutting of the basal branches to two-third of their original lengths, the laterals from them being cut off to two or three buds.

3. *Hybrid Perpetuals*: Same as for Hybrid Teas, excepting that the main basal shoots are cut back to the past season's length and the laterals that remain on the basal shoot being pruned to five to six buds.

4. *Bedding Roses*: (Hybrid Teas.) Pruned very hard, cutting back the basal shoots which are restricted to five in number usually, to half of their lengths to allow new growths besides a general pruning of the dead wood and cross limbs.

5. *Climbing Roses*: Lightly pruned by removing all dead wood and thinning a few crowded branches. In four to five year old plants, one or two of the oldest shoots are cut back close to ground level, to encourage new shoots and in the subsequent years the removal of the older trees becomes an annual feature.

6. *Other types*: Little if pruning is necessary. (only removal of dead and diseased shoots).

Trimming after flowering: This is an unique operation being practised only on The Nilgiris. This consists in cutting back the shoots to 8 to 12 inches after the flowering is over, which facilitates the production of fresh blooms on those shoots within six weeks, and thus aids continuous blooming on the plants from April to August.

Suckering: In all budded rose plants, sometimes the stock plants, i. e. the wild rose give out branches which are called suckers and these should be removed as they are useless growths which if allowed to remain will kill the budded plant outright.

Pests and diseases: The important pest in the familiar aphid or plant lice, which cluster in great numbers on the tips of growing shoot and suck the sap from the young leaves and buds. These are controlled by frequent sprays of 1% tobacco decoction when the attack is noticed. McFarland and Pyle (1937) advocate the application of a mulch of tobacco to the stems which is said to discourage the appearance of the pest and is thought to have some fertilising value too.

The leaf cutting bee is another pest which often damages the foliage in a semi circular form. This is controlled by a spray of arsenate of lead. Scale attack on the stem also is common during the winter months and is checked by an application of 1% Fish oil soap.

Among the Major diseases, the black spot of leaf and the mildew are of some concern. The black spot occurs through atmospheric infection and the affected portions are best cut and burnt with a preventive spray of 1% Bordeaux mixture.

Mildew is one of the commonest diseases that the rose-grower has to contend with. Its damage is not so serious to the life of the plant, but it ruins the bud and foliage by covering them with a felty whitish coating. It can be cured, but it is doubtful if it can be prevented (McFarland and Pyle, 1937) except by keeping the plants in vigour. Dusting of Sulphur is said to be a check over this disease.

Some selections of the best Roses for all purposes: 1. *Roses for Exhibition Purposes*: Those who wish to grow blooms of exhibition quality of large size, beautiful forms and colour can depend upon the following varieties:—

Crimson Glory :	Velvety crimson and fragrant.
Dame Edith Helen :	Fully double, glowing pink blooms.
Mrs. Sam McGredy :	Larged sized beautiful scarlet copper orange blooms.
Julien Potin :	Flowers primrose yellow large and double.
W. E. Chaplian :	Excellent Crimson rose which does not damage in wet weather.

2. *The Best Six for Garden Display*: For filling the rose beds and borders for a continuous and colourful display;—

Crimson Glory :	Velvety crimson and fragrant.
President Hoover :	A beautiful combination of vivid rose, coppery red and glowing orange yellow.
Eiole De Hollande :	An exceptionally fine variety with dark crimson flowers.
Madame Butterfly :	A beautiful rose with glowing salmon and flesh pink shade.
Shot Silk :	A mildew resistant variety with salmon orange coloured flowers.
Mrs. Sam McGredy :	A larged sized beautiful scarlet coppery orange bloom.

3. *The Six Best Scented Roses*:

Christopher stone :	Semi double flowers dark crimson scarlet in colour.
Dame Edith Helen :	Fully double glowing pink blooms.
General MacArthur :	An outstanding rose of deep scarlet flowers.
Lady Fortevoit :	A variety with characteristically large petals of golden yellow colour with apricot shade.

- Mrs. G. A. Van Rossem: An exceptionally beautiful rose with dark vivid apricot and golden yellow flowers.
Scented Daily Mail: Deep red flowers of fine shape, highly scented

4. *Best Standard Plants:*

- Betty Uprichard: Semi double to double flowers of pale salmon pink with carmin reverse.
Caroline Testont: A hardy variety bearing large silvery, satin-pink globular flowers.
Columbia: A prolonged bloomer with good shaped flowers of glowing rose pink.
Crimson Glory: Velvety crimson and fragrant.
Frau Karl Druschki: Finest white rose with every double flowers
Golden Dawn: Hardy variety bearing lemon yellow flowers.
Julien Potin: Flowers large, double and primrose yellow.
President Hoover: beautiful colour combination of vivid rose coppery red and glowing orange yellow

5. *Large Flowered Climbers:*

- Madame Butterfly: A beautiful climber with glowing salmon and flesh pink shade.
Lemon Pillar: A climber with shapely flowers of sulphur yellow.
Lamarque: Beautiful white clusters of flowers are borne.
Shot Silk: Flowers are salmon orange in colour.

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