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# Rose Varieties and Their Caring in Bangladesh

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#### **Abstract**

At the present context of Bangladesh in flower business without roses this sector is really incomplete. The size, color, and varieties of roses are increasing day by day. All nurseries or roof of the houses have many varieties of roses. People always like large and red-colored roses. 'American Rose/Lincoln' of Jashore and 'Miranda' of Savar Bangladesh are two main rose varieties. Rose flower has many petals so its pollination is not completed successfully. For creating new variety emasculation is done by experts. By using the shoot of wild variety (sucker) then grafting is very common in all hybrid varieties of roses. These hybrid roses are excellent in color, structure, and scent too. Rose plants are normally affected by some insects and fungi like other plants in the garden. Common insecticides and some preventive measures are useful for controlling those attacks. Organic manure and some chemical fertilizers are enough for maintaining these plants in summer and winter season. Among all flowers in Bangladesh the rose is the number one in any occasion.

#### Introduction

Rosaceae is a larger plant family which has hundreds of genera and over thousands of species including shrubs, herbs, and trees. They are climatically well-adapted and tolerate adverse environmental conditions. It is a shrub plant and has more than hundreds of species [1] and over 2000 cultivars [2]. Kenya, Japan, Italy,

United States, Netherlands, Israel, and Colombia are leading rose producing countries. In past, the roses are grown only for preparation of products such jam, rose water, and perfumes [3]. The rose is a sign of love and peace and used as a gift, also for welcome parties, wedding ceremonies, and many religious events. Rose flowers are aristocratic flower at all. Its color, vegetative reproduction, varieties, price, and acceptance all are enjoyable to everybody. The scent of this flower is remarkable and for this many insects may come. In nursery wild rose flower shoot is used for producing hybrid roses. The bud transplantation is the main procedure in this case. It has thorns so animals cannot eat this plant easily. Vermi-compost or very little amount of chemical fertilizer can be used [4]. If we provide more care on it of course flowers will be large and petals will arrange nicely. In Jashore of Bangladesh there are many lands only for rose cultivation. It has numerous colors. Black rose is not shown its real black color due to the climate of Bangladesh. From the Mughal dynasty these roses have come in Bangladesh. They cultivated it only for ornamental purposes. For the time being, depending on public demand for many cultural occasions like marriage, birthday, Valentine's Day, inaugural ceremony, cultural views now this rose flowers are cultivating as economic point of view. By cultivating this flower in any fallow land or on roof people can earn more currency. The objective of this study is to find out the main rose varieties of Bangladesh and their management system. In addition, try to implement to invent scentless variety of roses for overcoming such pests attack.

# Materials and Methods

# 71 N. S. Road, Kushtia, A Rooftop

This is my house where my elder brother is nourishing 5 types of rose flowers. He applies vermi-compost for blooming of all flowers. He has wild rose, Green Rose (*Rosa chinensis viridiflora*), black rose, shade rose, Chinese rose etc. Though his rose tubs are not large enough but only for observing or study this is not bad at all. All plants are free of infestation; plants get more sunlight for the photosynthesis.

# Bhadalia Nursery, Kushtia

Bhadalia of Kushtia, Bangladesh they have huge nice home adjacent nurseries. They supply many house plants, cactuses, fancy flowers, fruit plants, hedges, medicinal plants, and roses also. Budding vegetative reproduction were seen in most nurseries. For this they use the base of wild type so they get more hybrid rose plants.

#### Cantonment Areas

Any cantonment areas of Bangladesh those are educational institution or administrative buildings are full of rose flowers. As this area is totally protected and their more care these roses are shown excellent with texture, color, and size also. This area can be a part and parcel to research not only on all flowers but also on rose because this is very common and available flower.

# Godkhali Jashore

In this area, the farmers cultivate huge flower and most of them are roses. All are 'American Rose' and large in size and blackish-red in color. People like large and red roses first. In winter season these roses bloom in huge numbers. Some diseases of the rose plants may occur and in this case only few pesticides spray are

sufficient. This bad incident does not make any pronounced effect to the farmers. Farmers use a net like cap when the buds come out. They sell these flowers with high price when the blooming season is out. If any stem of roses are shown rotten the farmers cut that branches then and there. Water drainage system plays a good role for rose flower blooming naturally.

# **So-Called Flower Shops**

Many flower shops which are located in every town were huge with rose flowers. This rose is a current item of all shops. Any flower bouquet without rose is not accepted said those shop owners. Flower shops of Khulna, Jashore, Kushtia, Rangpur, Saidpur, Nilphamari, Dinajpur of Bangladesh were visited in order to observe the status of rose flowers. The experiences of those flower suppliers, sellers, buyers, and cultivators were helped for writing this common but exception article for compiling information for further studies or setting another idea to pick-up something new.

# Sellers and Buyers Opinion

During the time of this work, in those nurseries, the buyers or sellers interview were the materials. If anybody comes in nursery with all plants they will buy at least one rose plant. Red-colored rose is very common in all nurseries. Rose flower is cactus type plant so it needs little water. Moreover, its longevity is higher than other plants. This is undershrub plant. Pruning in summer season can help its better output in winter. The sellers of those nurseries make grafting especially T-grafting after winter. Well-drained loamy, silty loam and sandy loam soil with pH between 6 and 7.5 is favorable for rose cultivation; however, rose can also grow and tolerate pH range up to 8 [5].

# Sampling Technique and Data Collection

A multi stage sampling technique was followed in this study to select study area and sample farmers. Data for the present study were collected from sample rose farmers through interview.

#### Results

#### Care in Winter Season

Dead leaf causes fungal infection so that we should remove it. If there are insects on leaf, water spray helps for proper removing them. We should remove the root stock below the grafting area of the hybrid roses. For potting, those rose plants 10-15 inches tub are good. NPK fertilizer in a month is good for this plant. Bone meal dust 1-1.5 teaspoon 15-20 days interval, potash 1 spoon in a month, horn meal (if possible) 1-1.5 teaspoon 15-20 days interval, super phosphate 1 spoon in a month, and tea leaf whatever you like should use for better flower production of rose plants.

#### Care in Summer Season

As summer is not the flowering season of rose plants so only infected leaves or branches should cut. After cutting those branches of course we will use any antifungal (SAAF or turmeric dust). Finally some fertilizers

like vermi-compost [4], bone meal and if possible horn meal can be used. Rose plant does not like excess sun in summer season. This time only two hours sunlight is enough for their survival. In this regard, keep rose plants in any shady area and ensure sun only 2 hours.

#### **Observed Diseases of Rose Plants**

Thrips tabaci is one type of insect which infests rose plants commonly. Dieback and black spot disease (Diplocarpa rosae) were found in many nurseries or rooftop gardens. These two problems are caused by fungus. After mixing 1 teaspoon baking soda, 1 teaspoon liquid soap, and warm water spray is effective for this Black Spot Disease and powdery mildew. After cutting or pruning or during grafting if we do not use any antifungal these incidents happen.

# Discussion

Out of 150 total rose varieties of the world in Bangladesh have nine varieties [6]. In Rose group it is divided into 7 categories. Viz- Polyantha (China Doll), Hybrid (Lincoln), Floribunda (Iceberg), Grandiflora (Queen Elizabeth), Climbing (Blaze), Miniature (Starina), and Landscape/Shrub (Altissimo). In Jashore Bangladesh, they cultivate 100% Lincoln/American Rosered-colored variety but in 'Golap Gram' of Savar Bangladesh they produce only Miranda variety. This Miranda variety is large-sized and pink in color. Observed colors were red, pink, white, magenta, tawny, green, shade etc. So-called black roses are found but the color is not true black, our weather can be a cause on it. Bangladesh is available with Papa Meilland, Bengali, Dutch Gold, Iceberg, Queen Elizabeth, Sunsilk, King's Ransom, Julia's Rose, Rose Gaujard, and the modern species are Rosa involucrate or R. clinophylla, Rosa rugosa, R. mundi, R. centifolia, R. canina, R. damascene, and R. gallica etc. In Pakistan, most roses are planted in garden as ornamental [7]. Flowers produced in the country are used locally, and small amount was exported to the Middle East while a large number of flowers are wasted [8]. Chinensis species is very common in Bangladesh and its origin is China and Burma [5].

#### Conclusions

In Bangladesh we have lots of nurseries or rooftop gardens. Most of them are full of rose flowers. Rose flowers are recognized here only on the color then the size. So-called 'Tajmahol Rose' is very scented and found few. Its color is pink and large-sized. In some nurseries they are trying to produce hybrid roses by artificially pollinating between two types of roses. In the country, now we see some shade-colored roses. Climbing roses are found in some front sides of the house. These are bushy and its small flowers look nice as a whole. Landscape roses are not available in Bangladesh. Normally wild or local roses are considered in this way but this is good for its shoot for grafting with good variety. Jashore and Savar of Bangladesh are famous for rose planting. They produce and supply their good quality roses around Bangladesh. Now in some parts 'American Rose/Lincoln' is cultivating. Its many petals, size, and red color have gained popularity. BRAC Bangladesh has produced more than 20 different colors of roses. The cultivation of rose was highly profitable at farm basis because of its higher demand. Production of rose hampered in our country due to lack of technical knowledge, high yielding varieties, and infestation by many pests [9]. Green and black roses have introduced recently in Bangladesh but these are not popular as others.

#### Recommendations

For growing rose flower successfully 10 tips are important-

- 1. We should collect container roses from the nursery always.
- 2. After collecting rose plants we should re-pot that.
- 3. Ensure the drainage system of the rose tub.
- 4. Good soil and chemical fertilizers are essential for this plant.
- 5. Sunlight is important for its photosynthesis for the perfection of the flowers. In summer, it needs only two hours sunlight.
- 6. Daily watering is must but not too much or too less.
- 7. Spray 'Epsom Salt' on rose plants.
- 8. Control all pests by using prescribed medicines.
- 9. Dead heading cutting method after some days of blooming.
- 10. Trimming/Pruning is good in summer season for their proper shape in the blooming season.

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