Scientific Cultivation of Gypsophila

Srushti K. Pandya[1] and Dr. Harsh S. Hathi[2]*

[1] *Ph.D. Research Scholar, ASPEE College of Horticulture, Navsari Agricultural University, Navsari, Gujarat, India.*
[2] *Assistant Professor, Department of Agriculture, Faculty of Science, Marwadi University, Rajkot, Gujarat, India*

Corresponding Author
Dr. Harsh S. Hathi
Email: harsh.hathi@marwadieducation.edu.in

OPEN ACCESS

Keywords

Gypsophila, Scientific Cultivation Practices

How to cite this article:

Pandya, S. K. and Hathi. H. S. 2026. Scientific Cultivation of Gypsophila. *Vigyan Varta* 7 (05): 180-182.

ABSTRACT

Gypsophila, popularly known as Baby's Breath, is a beautiful flowering crop widely loved for its small, delicate white flowers that add elegance to bouquets and floral decorations. It plays an important role in the floriculture industry because of its attractive look, long vase life, and high demand in the market. The crop grows best in cool weather with well-drained fertile soil and proper care. Timely irrigation, balanced fertilizers, and pest management help in producing high-quality flowers. Due to its commercial value and increasing popularity, Gypsophila has become a profitable option for flower growers.

INTRODUCTION

Gypsophila is an herbaceous plant. Depending on the species, it can be an annual or perennial. They have aerial flowers, often white, sometimes pink which are widely used in bouquet preparation and royal weddings nowadays. Gypsophila is a species of flowering plant in the Caryophyllaceae family.

A well-known species is *Gypsophila paniculata*, commonly known as the bridal veil plant. It is a perennial plant for ornamental

use by its white flowers which are very often arranged in the form of a bouquet. Its original place of origin is central and eastern Europe. *Gypsophila paniculata* and *Gypsophila elegans* are popular species among all. They are mostly used as a filler to flower arrangements and floral boque.

Gypsophila is deep rooted plant whose stems are stiff and swollen somewhat. The leaves are in opposite direction, scaly, bluish-green in color and small. Many small flowers form complete inflorescence. Each flower is having 3–10 mm diameter with small, gray or pink petals.

➔ Climate requirement for gypsophila:

Temperature: Longer days with warmer temperatures promote better flowering. This plant preferers 26-32^0 C day temperature and 15-20^0 C night temperature. Low temperature at night causes the plant to remain in its vegetative state. Gypsophila can tolerate low snowfall. It can also tolerate somewhat drought. However, the extremely hot weather during March to May significantly affects the quality of flowers. Higher temperature causes plants to bloom more vigorously with fewer flowers. Soon it dries up and length of stalk also the stalk also decreases.

Soil: Gypsophila plant prefers soil which are rich in organic matter and having 6.5 to 7.5 pH. Soil should have good drainage capacity because this plant cannot tolerate water logging condition.

➔ How to grow gypsophila seeds?

Seeds are sown in a pot containing nutrient rich poting mixture in April to May month. Seed are covered after sowing and keep as such until seedling becomes strong enough to transplant. Well grown, healthy seedlings are directly transplanted to the well prepared soil. Transplanting is done in May to July month.

➔ Choice of place

Mostly gypsophila is grown under greenhouse or any other protected structure to get quality blooms. If one wish to grow gypsophila in open field, then the place should have warm climate, sufficient sunlight as well as shade and watering facility throughout the year. Plant must be protected from strong wind and scorching sun. Water logging must be avoided at any place of field.

➔ Common soil microorganisms

Soil disinfection is absolutely essential before planting gypsophila. Formalin, H_2O_2 and Basamid can be used for soil decontamination. In greenhouse, heating technique is used for decontamination of media. Formalin @ 7.5-10 liters/100 m^2 is used. After application, soil is covered with plastic for 7 days and then planting is done after 7-10 days of opening it.

➔ Manures and Fertilizers

Gypsophila plant requires low amount of nutrients. It is a shallow feeder crop so; heavy application of fertilizers results into poor quality inflorescence development. NPK @ 100:40:60 kg/ha is the general recommended dose of nutrient for this crop. Fertilizers are mostly applied weekly for this crop but stop giving fertilizers when the inflorescence reaches height of 25 cm. General micronutrients are applied as and when needed after proper leaf analysis. Fertilizers can be applied with drip irrigation or by spraying on leaves. Besides all this chemical fertilizers, use of organic manure or organic liquid nutrient is highly recommended for higher yield and good quality flowers.

➔ **Support**

A support using nylon netting is essential to obtain a straight and sturdy inflorescence. If proper support is not provided, stem tends to become break or wilt and it will result into stunted growth and poor quality inflorescence. Net should be laid out within 3 weeks of planting and before pinching stage. First layer of net should be at 20 to 30 cm height with 20×20 or 30×30 cm distance. For obtaining strong and sturdy inflorescence for export, another layer of net at 45 cm height is recommended.

➔ **Pinching**

Pinching is essential operation for getting quality blooms. Small growing portion from top of plant is removed with hand leaving 8-10 pair of leaves. It is called pinching. Pinching is carried out in vegetative stage, mostly after 5-6 weeks of transplanting. Pinching results into breakage of apical dominance and development of lateral shoots. This will give entire inflorescence a healthy lateral growth and a marketable appearance. It also increases quality and yield of flowers.

➔ **Harvesting and Post Harvest Technology**

The flowering stem in which 30 to 40% of the flowers are open should be harvested. Harvesting should be done at proper stage because delay in harvesting causes browning of flowers. Harvesting stem should be placed in buckets containing post harvest solution which contains sucrose and germicide. Do not harvest flowers in full sun. After harvesting, inflorescences are bunched for further transport.

➔ **Yield**

Generally, 8-12 flowering stems per plant per flush can be obtained under good management.


CONCLUSION:

Gypsophila is a valuable flower crop with high market demand and good profit potential. With proper cultivation practices, timely care, and post-harvest management, growers can achieve quality blooms and better economic returns.

REFERENCES:

Singh, A.; Chawla, S. L.; Shah, H. P.; Patel, M. A. and Patel, R. B. (2013). Manual cut flowers. Navsari Agricultural University, Navsari, Gujarat.