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SNAPDRAGONS (*Antirrhinum majus*)

Snapdragons are native to northern temperate zones, with a focus in the Mediterranean region. The dense flower spikes bear tubular or butterfly-shaped blooms in an array of colors popular for use as cut flowers.

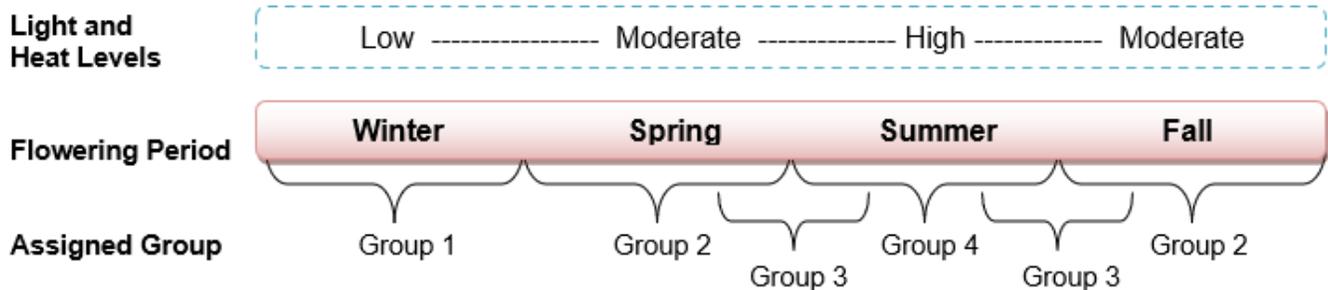
HARVEST PERIOD

Snapdragons are highly responsive to day length and temperature. Modern varieties have been bred for optimal performance under specific growing conditions and seasons. Most snapdragon varieties are classified into numbered groups corresponding with the growing and harvest periods for which they are bred. Many varieties will bloom and produce usable stems outside of their assigned group but lower stem and flower quality will likely result. Plantings should be scheduled according to season, variety, and group to ensure maximum stem length and bloom quality for your climate and growing season.

The Johnny's website includes the group designation in the product description for each snapdragon variety that we sell. For more information on snapdragon groups and how to time your plantings by group, read our article at: Johnnyseeds.com/snapdragon-groups



Snapdragons can be grown in either the field or a protected growing environment. Crops grown in a greenhouse or tunnel produce higher quality blooms and stems.



BLOOM TYPE

In addition to differing by harvest season, snapdragons differ in the style and shape of the blooms they bear. The choice regarding which type to grow depends upon personal or market preference.

Traditional. The most common single-petaled type. Most notable for resembling the appearance of a dragon's mouth snapping open when pinched, from which the common name derives.

Azalea. This type has double petals, providing a unique, voluminous appearance.

Open face. Another single-petaled type with petals in an open array.



Traditional



Azalea



Open face

LIFE CYCLE

Snapdragons are most commonly grown as an annual but are winter-hardy in mild climates. Snapdragons can also be overwintered in a protected environment in regions as cold as Zone 5. For detailed information about overwintering snapdragons visit Johnnyseeds.com/overwinter-flower-trials.

SITE SELECTION & PREPARATION

Snapdragons can be grown either in a protected structure or the open field. We've found that growing in a protected structure produces higher quality blooms and stems, due to the reduced weather and insect pressures.

Snapdragons grow best in cool weather and can tolerate a light frost. They perform best in full sun to part shade in rich, well-drained soil with a pH of 5.5–5.8.

Drip irrigation is recommended, but overhead irrigation can be used until the plants start to flower. To prevent disease, water early in the day so that the foliage is dry by nightfall. Inside protected structures ensure proper ventilation on sunny days.

Covering beds with white-on-black mulch keep soil cool and suppress weeds; this is a particularly effective method of weed control around drip irrigation. One or two layers of horizontally laid

trellis netting will support the stems, keeping them straight.

CULTURE

Surface sow seed in a 128-cell tray or preferred seedling container, 8–10 weeks before planting out after the last frost. Light is needed for germination, but a thin layer of fine vermiculite covering the seed will help maintain moisture levels and prevent algae growth. Bottom-water or mist lightly to avoid covering the seed with displaced soil. Germination should occur in 7–14 days at 70–75°F (21–24°C). Provide adequate air circulation to further prevent algae growth and the occurrence of disease.

After emergence, place cell trays in a location where they will continue to receive good air circulation. Reduce moisture levels and keep soil evenly moist but not saturated for best rooting. Maintain a soil temperature of 65–75°F (18–24°C).

Once the true leaves have developed, in approximately 21 days, allow the soil to dry out between watering but avoid wilting to promote root growth. After the seedlings have 3–5 true leaves, growing on at 50–55°F (10–14°C) at night and 60°F (16°C) during the day is optimal.

If fertilizing is necessary, use an all-purpose fertilizer every 2–3 waterings. Occasional drenching

with clear water is helpful to reduce soluble salts from building up.

For best results, harden off plants by gradually exposing the seedlings to their outdoor environment 8–10 weeks after sowing. Transplant when the plants are acclimated.

SPACING

The distance at which you space your plants depends upon your desired plant habit.

Branching / multistem production. For a bushier plant that produces more flower-producing lateral branches, pinch young plants back. Once seedlings have formed several sets of true leaves, are approximately 3–4" tall, or are ready to be planted out, pinch seedlings back by half their height or to 2 sets of true leaves. Pinching will delay the crop time (flowering) by up to a few weeks. Transplant at a spacing of 6–12" apart to allow enough space for branching and production of multiple stems.

Single-stem production. For one-cut, single-stem production, do not pinch the plants and transplant at a tighter spacing of 4"x4". This production style results in plants with a single, strong stem of superior length and bloom quality. Single-stem plants bloom earlier than plants that are pinched.

One or two layers of horizontal netting is recommended to support the production of straight, upright stems in both production methods.

PESTS AND DISEASES

Crop rotation should be practiced to prevent the build-up of pathogens and pests in the soil. The most common pests of snapdragons are aphids and thrips. Snapdragons are susceptible to rust, botrytis, powdery and downy mildews, and other diseases, of which rust is the most prominent. Caused by the species-specific fungal pathogen *Puccinia antirrhini*, rust can be identified by a build-up of dark-brown to purple spores on the stems and leaves. The most accurate way of identifying disease is to send a sample to your local Cooperative Extension service or other agricultural research station.

HARVEST

Harvest when the blooms on the lower one-third to half of the spike are open. Harvesting is best accomplished in the morning, when temperatures are at their coolest. Place cut stems in clean buckets of cool water. For optimum storage, place buckets in a cooler at 32–40°F (0–4°C). Floral preservatives can be used to lengthen vase life.

Snapdragon stems are geotropic, meaning they are sensitive to gravity. If the flower stems are laid horizontally or placed at an angle, the distal ends will reorient themselves in an upward direction. Once the stems are curved they become fixed after a few hours. Stems will remain curved, even if they are stored vertically after the fact. It's therefore important to store stems vertically in tall buckets after harvest and to keep them supported while growing in the field.

Snapdragon blossoms are edible and can be used as to garnish salads, desserts, and drinks. Flavor is floral and slightly bitter.



Snapdragons are ready to harvest when the blooms on the lower third to half of the spike are open.