

Cultural Details: **Aquilegia**

Aquilegias are popular hardy perennials for garden planting. Recent breeding work has produced large-flowered hybrids which, when grown with a little heat over Winter, attract a premium price in full flower in April and May.

Aquilegias are relatively straightforward to raise.

Variety Selection

A number of compact varieties, such as *Aquilegia alpina*, Mini-Star and the recently introduced Cameo Series, make good rockery plants, sold in flower in late Spring.

'McKana Giant Hybrid' is the most popular choice for the perennial perennial plant programme, generally sold as a green plant with a colour label. It is one of several open-pollinated types for use as border plants in early Summer.

Several large-flowered F1 hybrids have recently been introduced, for premium sales. Aquilegias all need a cool period to induce flowering. The most recent hybrid introduction is Origami, which has a minimal cold period of 2-3 weeks at 8-10°C, so sowings can be made much later.

Programming the Crop

Standard culture: Sow from May to July, for sales as green plants in the Autumn and Spring, and flowering plants in late April-May.

Forced Culture: Sow in September-early October, for flowering April-May.

Propagation and Growing-on

Sow the medium-sized seed (around 700 per gram) onto the surface of a free-draining, open, seed sowing compost, which should be thoroughly wetted with a suitable fungicide prior to sowing (to prevent damping-off diseases), and the trays allowed to drain. Sow into plug trays (at two seeds per cell for the cheaper varieties) to prevent root disturbance, or into seed trays. Cover the seeds with a light covering of vermiculite, and cover trays with clear or milky polythene to maintain humidity, until the first seedlings are visible. Germination takes up to 21 days at 18-21°C. Keep the germinating seedlings moist at all times.

Standard Culture:

Move the young plants on into 9 or 10cm pots when large enough to handle. Grow on at around 15-18 °C until they are nicely established, then grow on at ambient temperatures through the Summer, under shading if possible. They can be sold as soon as there is good leaf coverage in the pot, as a green plant with a colour label. Foliage dies back in the Winter, then attractive pale green new foliage appears in the Spring. Ideally keep the plants overwintered under cover, (e.g. an airy, well-ventilated polytunnel) on the dry side to prevent rotting off. No heat is required. Liquid feed during periods of natural rapid growth.

Forced Culture:

Sow September (October for Origami) singly into small-celled plug trays as above. Grow on for around 6-8 weeks at 18-20 °C until the plugs can be moved onto larger cell trays, for around 8 weeks, at similar temperatures. Do not allow the plants to become rootbound at any stage, and maintain a liquid feed programme throughout the culture.

Transplant then into 14-16cm pots, and as soon as the plants are established in these, reduce temperatures to 13-15 °C day and 8 °C night, essential to induce flowering. Plants should begin to flower around 12 weeks after potting, giving a total culture time of around 6 months

Pest and Disease

Maintain good air movement through the crop, and water in the morning rather than the evening to keep the foliage dry and lessen attack by Botrytis. Pay good attention to glasshouse hygiene, using only fresh trays, pots, compost, water and clean bench tops to avoid damping-off diseases, and check for the presence of insect pests such as aphids and whitefly, spraying accordingly.

Information provided for guidance only, as cultural practices and climatic circumstances vary.