





## AQUILEGIA atrata

Columbine

Item No.: AA598

Portion Price (usually sufficient for approx. 50 plants)	1g Price (0.1-9.9g)	10g Price (10-99.9g)	100g Price (100-999.9g)	1000g Price (1000-9999.9g)	10000g Price (10000-99999.9g)
3,10€	6,20€	44,00€	352,00€	-	-

### Plant Description

<b>Life Cycle</b>	Perennial
<b>Family</b>	Ranunculaceae
<b>Origin</b>	Alps, Apennines
<b>Basic Colour</b>	(grey / black)
<b>Flower Colour</b>	black-violet
<b>Natural Flowering Period</b>	May - June
<b>Winter Hardiness Zones</b>	Z3 - Z8
<b>Height with Flowers</b>	50 cm
<b>Soil Requirements</b>	moist / well-drained / average
<b>Location</b>	 
<b>Usage</b>	for the rock garden

### Cultivation

<b>Grams per 1000 seeds</b>	1.33333 Gram
<b>Seeds per Gram</b>	750 (does not correspond to the number of plants!)
<b>Gram to get 1000 plants</b>	5 Gram (if sown directly into pots etc. you will need a larger quantity)

**Sowing Direction**

(1) Cold-germinators are still referred to as frost-germinators, although this isn't quite correct. The sowing must be kept warm (about +18 to +22°C) [about 64 to 72°F] and moist for the first 2–4 weeks. After this period the sowing must be kept at a cold temperature (between –4 and +4°C) [between 25 and 39°F] for another 4–6 weeks. Colder temperatures of –5°C [23°F] are only advantageous for most species of the Ranunculus family. It is not so important if the temperature is higher or lower during the cooling period, but the cooling period has to be prolonged because the synthesis of the germination inducer, hormon-like acid, slows down or comes to a standstill. It is beneficial to cover the sowing with snow during the cooling-period. The temperature below it usually keeps in the optimum range of –4 to 0°C [25 to 32°F]. The sowing is kept moist, and the melting snow helps to destroy the shell, which is advantageous for the germinating seedling. After this cooling-period the sowing may not be immediately exposed to high temperatures. The most effective temperatures are between +5 to +12°C [41 to 54°F], even if germination has started. The best location for this sowing, even in March, April and May, is the open field, the cold frame or a cold greenhouse.