



HUMULUS lupulus


Common Hops

Item No.: HO280

Also available as: Normal Seed GOLD NUGGET SEED ®

Portion Price (sufficient for 50-100 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)
6,80€	6,80€	40,00€	245,00€	1.470,00€	-

Plant Description

Article Type	Organic Seed DE-ÖKO-006
Life Cycle	Perennial
Family	Cannabaceae
Origin	Europe, North America and Asia
Special Features	Attractive 'cone-like' seeds on female plants. Straw-colored flowering bracts. Plant on fence posts or trellises. Medicinal Plant of the Year 2007 in Germany.
Historical	Female plants are the source of hops, one of the principal ingredients of beer. Humulus is also related to cannabis.
Basic Colour	(yellow / gold)
Flower Colour	straw-colored
Natural Flowering Period	July - September
Winter Hardiness Zones	Z4 - Z9
Foliage	opposite leaves with 3-5 lobes and bristly stems, green
Growth Habit	climbing
Height with Flowers	200 cm
Spacing between Plants	100 cm
Soil Requirements	sandy / average / loamy
Location	
Characteristics	medicinal plant / beneficial plant / culinary herb

Cultivation

Grams per 1000 seeds	3.7037 Gram
Seeds per Gram	270 (does not correspond to the number of plants!)



Gram to get 1000 plants	10 Gram (if sown directly into pots etc. you will need a larger quantity)
Sowing Rates/Trays	3 per cell
Plug tray recommended size(s)	72 / 128
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.

Scheduling

Best Sowing Date	late autumn - early spring (northern Hemisphere, Field condition)
Sowing to Germination	9 - 12 weeks
Germination to Transplant	3 - 4 weeks
Transplanting to Potting	6 - 8 weeks
Cutting back at Transplanting	Cut-back once to keep more compact.

Growing On

Container Size(s)	1-2 plugs per 11/12 cm (4 1/2") / 2-3 plugs per 15 cm (6")
Vernalization	There is no current research on vernalization but a prudent recommendation for any perennial would be 6-12 weeks (a few might need 15 weeks!) at an average daily temperature of 40°F (5°C). Exposure to cold may not be necessary for flowering but might improve quality.
Forcing	An obvious place to experiment - following vernalization - would be raising daytime temperatures to 60° - 65°F (15° - 17°C). Provide 16 hours of continuous lighting. During the short days of winter, provide a night interruption lighting of 4 hours between 10:00 p.m. and 2:00 a.m.
Fertilizer	Medium (150-200 ppm)