

Dianthus barbatus biennial

Barbienne series

biennial
900 s/gr

CUT FLOWER CULTURE

culture plastic tunnel/outdoors

sowing method DS /TP

sowing season

see note in cultural info

germ temp. 18-20°C (65-68°F)

growing temp. 10-13°C (50-55°F)

plug crop time

6 weeks

total crop duration

28-40 weeks

seed requirement

100 gr/m²

3 gr/1000 plants

pests/diseases

Aphids, thrips, caterpillars, leaf spot, viruses. Rust (Puccinia) is best treated preventatively. The Barbienne series is reasonably tolerant to rust.

fertilization (f)

Medium requirement, 175-225 ppm N, 1.2 to 1.5 EC.

SOWING DETAILS

• Directseeding (DS):

soil : well-drained fertile soil

sow : 1 gr per m¹ or 100 gr/m²

in rows: 25-30 cm

Germination time 7 - 10 days

• Pre-sow and transplant (TP):

Soil : sterile sowing mix,

pH 5.8-6.2, EC 0,5-0.75

Sow : 1 seed/plug (large plugs)

Cover: light cover with
coarse vermiculite

days 0-4

(m) level 4

(t) 18-20°C (65-68°F)

(l) optional

days 5-14

(m) level 4

(t) 18-20°C (65-68°F)

(l) 500 lux (46 fc)

(f) < 100 ppm N, < 0.7 EC

days 14-21

(m) level 3-4

(t) 13-16°C (55-60°F), keep

greenhouse as cool as possible

(l) 1000 lux (92 fc)

(f) 175-225 ppm N, 1.2-1.5 EC

GROWING ON

soil/media

well-drained fertile soil,
pH 6 - 7, EC 0.75 mmhos/cm

netting

Netting is not necessary.

pinching

Pinching is required for a uniform harvest.

plant density

DS: row distance 25-30 cm

TP: 42-64 plants/m² (4-6 pl/ft²)

moisture (m)

Soil surface should remain moist during the entire growing period. Drip irrigation is preferred when flowering starts.

temperature (t)

10-15°C (50-59°F) keeps plants low growing and basal branching. Avoid temperatures over 18°C (65°F). A cold period is essential for flower induction: see cultivation tip.

light (l)

Full sun/high light intensity. Facultative long day. High light with high temperatures will result in shorter stems.

CULTIVATION TIPS

- Early- and late-flowering varieties in Dianthus barbatus are available for a longer (open field) cut flower harvest period.

- Most varieties need a cold period for flower induction:

- When 8 leaf pairs are visible, biennial Dianthus barbatus needs an 8 week period of 2-5°C (35-41°F) for flower induction.

NOTE

- Greenhouse culture:

(pre-sow outdoors (NL mid July):

plant late summer/early autumn

(NL wk 38-42) for harvest late

winter to mid spring (NL wk 8-16).

- Open field culture:

plant mid summer (NL week 32-34)

for harvest mid spring to early

summer (NL wk 17-22).

HARVEST

Harvest when 2 to 4 flowers in the cluster are open.

For post harvest treatments, see:

www.vbn.nl/en/longevity or

www.vbn.nl/houdbaarheid

moisture levels (m): 1 = dry 2 = normal to dry 3 = normal 4 = moist 5 = wet

This information is for general guidance only, and is in some cases specific for West European conditions. No guarantee is given for the result of the crop, nor is liability accepted for the consequences of applying the indications given.