

GREENHOUSE FORCING OF BLEEDING HEART

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Dicentra spectabilis, Old Fashioned Bleeding Heart, is a perennial garden flower that can be produced as a pot crop. Its red and white heart shaped flowers make it especially appealing for the spring holidays of Valentine's Day and Mother's Day. Another selling point is that consumers can enjoy it both as a pot plant and then, in the following years, in their perennial garden. A bonus to the grower is that Dicentra can be grown with greenhouse temperatures as low as 52° F, with no special cultural practices other than basic watering and fertilization.

General requirements for greenhouse culture are: 1) 4-5 weeks forcing time at 52° F, 2) a growth retardant, and 3) a pest free, healthy plant crown. Bleeding hearts are field grown. Crowns are dug in the fall and have a minimum of 2-3 eyes for forcing. They are then placed in cold storage.

Before potting, the plant roots are trimmed (up to 75%) to facilitate planting. This does not adversely affect plant growth. Plant into a 5-6" pot. A light soil mix or a soilless root medium is suggested. They may be forced at higher temperatures; at 65° they may flower in 3 weeks.

Bleeding Hearts grow to 2-3' in the garden and will also grow too tall in the greenhouse. The crop requires height regulation to be a saleable pot plant. When the leaf blades on the emerging shoots begin to unfold (about 6-10 days after planting), a 1250 ppm daminozide (B-Nine) spray should be applied. Treatment with ancymidol (A-Rest) delays flowering and severely compresses the inflorescence (Weiler and Kirk, 1984).

Another species to try is Dicentra exima, Fringed Bleeding Heart. Since this plant normally grows only 12-18" tall, it should require little or no height control. The flowers are somewhat different in shape than the Old Fashioned Bleeding Heart, and are pink to purple in color, but are just as attractive. Weiler (1984) notes that they may require 6 weeks at 60° to force. If you try this species and have any suggestions, please let us know.

TABLE 1

Planting and timing schedules for pot plant production of Old-Fashioned Bleeding-Heart for Valentine's Day.*

<u>Night temperature</u>		<u>Event</u>
<u>52-55° F</u>	<u>62-65° F</u>	
Jan. 13	Jan. 20	Plant cold-stored crowns Normal day length
Jan. 20-24	Jan. 26-29	Leaves unfolding--apply B-Nine spray at 1250 ppm Use surfactant for full coverage of foliage
Jan. 25-29	Jan. 30-Feb.3	Inflorescences visible
Feb. 10	Feb. 10	Plants starting to bloom
Feb. 14	Feb. 14	Valentine's Day

* Adapted from Weiler (1984)

References

Still, Steven. 1982. *Herbaceous Ornamental Plants*. Stipes Publishing Co. Champaign, Ill. 1982. pp. 80-81.

Weiler T. C., and T. I. Kirk. 1984a. *Height Regulation of Bleeding Heart*, *Greenhouse Grower* 2(2):26,28.

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Weiler, Thomas C. 1984. *Guide to Valentine's Day Old-Fashioned Bleeding Heart Production*. NY State Flower Industries Bull. 166:2-4.