

Rooting Pinkroot . . . Then Keeping Them Alive[©]

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Spigelia marilandica, family Loganiaceae, also known as pinkroot, Indian pink and wormgrass, is native to moist woodlands of the southeastern United States. It is a clump-forming herbaceous perennial with abundant flowers from June into September. Plants range from 12 to 24 inches tall with tubular flowers carmine-red on the outside and yellow on the interior which are displayed above medium green foliage. Because of its attractiveness, pinkroot is a desirable ornamental plant for woodland gardens in hardiness Zones 7 to 9 and partially sunny, moist borders in hardiness Zones 5 and 6. In addition to its ornamental characteristics, pinkroot has also been reported as valuable for folk remedies as well as being listed as a poisonous plant.

Propagation has most often been carried out by division because seeds have been difficult to obtain, principally due to both the small seeds being propelled away from the plant through a natural dispersal system as soon as they become ripe and the need for seeds to be sown fresh (Cullina, 2000). Rooting stem cuttings had been reported as difficult but work by the authors as well as Cullina (2000) supports that rooting of cuttings is possible in good percentages as long as certain precautions are taken. Rooting cuttings is having a high percentage of plants alive the following spring has proven to be a greater problem and led to the series of experiments we summarize.

TIPS FOR SUCCESS WHEN ROOTING *Spigelia marilandica*

- Cuttings should be taken early. Percentage rooting declines dramatically once flowers appear. If flowers do appear on cuttings, remove the flowers. Forcing container-grown stock plants in late winter or taking cuttings from naturally grown, healthy stock plants before late spring results in the most vigorous liners the following spring.
- Two- or three-node tip cuttings root at higher percentages than woodier subterminal cuttings. It is important that one node is located within the rooting medium.
- An IBA liquid of 2000 to 3000 ppm produced the best roots and highest rooting percentage. No advantage to K-IBA over IBA in alcohol was noted. No bottom heat was used.
- Root in a well-drained medium. A washed perlite and sphagnum peat (2 : 1, v/v) medium worked well. Rooting under intermittent mist or in plastic tents was equally effective.
- Direct stick into small pots rather than using community flats.
- Root cuttings in shade and grow thereafter in shade. A 50% lath shade or black plastic woven shade worked well. Cuttings and liners both become chlorotic when grown in full sun.

- Summer cuttings will need to be overwintered in minimally heated greenhouses to survive in reasonable percentages.
- No beneficial effect in rooting existed from treating stock plants with either long or short photoperiods or rooting under long or short photoperiods.
- No difference in survival or vigor existed from fertilizing with either controlled release or soluble fertilizers. Fertilizer was applied at the “low” label rate with the controlled-release fertilizers or 50 ppm nitrogen for the liquid fertilizer after plants had rooted which was usually 4 to 6 weeks after cuttings were stuck. Earlier cuttings rooted faster than later season cuttings.

LITERATURE CITED

- Cullina, W.** 2000. The New England Wild Flower Society guide to growing and propagating wildflowers of the United States and Canada. Houghton Mifflin Co. Boston.