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Natural Resources Conservation Service

## NATIONAL PLANT MATERIALS CENTER BELTSVILLE, MARYLAND

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TECHNICAL NOTE

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### WILDFLOWERS FOR THE MID-ATLANTIC: NEW YORK IRONWEED (*Vernonia noveboracensis*)

Prepared by: Jennifer L. Kujawski, *Resource Conservationist*, John M. Englert,  
*Horticulturist*, and Hugh Hayward, *Greenhouse Manager*

#### INTRODUCTION

New York ironweed, *Vernonia noveboracensis*, is a native perennial wildflower that commonly occurs on the East Coast from Massachusetts to Florida (Jones and Foote, 1990). It is generally found in moist locations: wet meadows, pastures, streambanks, and open woodlands, and has an wetland indicator status of FACW+ in the Northeast and mid-Atlantic states (Reed, 1988). The plant grows to a height of 3 to 6 feet, with dark green narrow lance-shaped leaves arranged alternately along purplish stems, and is fairly nondescript until it begins to bloom in late summer. During late August through September in Maryland, several flower heads containing 30 to 50 vivid purple flowers burst into bloom on the upper part of each plant. Individual flowers in each inflorescence are tubular and 3/8 inch long (Godfrey and Wooten, 1981). Seeds are slate grey nutlets, 1/4 inch long, with rust colored chaff attached to their tops (Phillips, 1985).

#### USES

New York ironweed is a useful plant for providing early fall color in wetter areas along roadways. The National Plant Materials Center (NPMC) produces New York ironweed plugs for moist site revegetation plantings between the Potomac River and the George Washington Memorial Parkway in Virginia. The plant is also highly recommended for use in home perennial borders, as a cut flower, and as a swallowtail butterfly attractant (Wilson, 1992; Phillips, 1985; Sperka, 1984).

#### SUITABLE SITES

New York ironweed grows naturally in full sun, although it can tolerate afternoon shade (Wilson, 1992). While the plant will become larger in moist soil (Phillips, 1985), it has grown to 3-1/2 feet and flowered in the well-drained sandy loam soil at the NPMC.

#### SEED COLLECTION AND AVAILABILITY

New York ironweed plants are available from catalogues and nurseries, but seeds can be easily collected from wild populations. Seeds are ready to collect approximately 1 month after flowering (Phillips, 1985), but are persistent and can be collected into late fall. The NPMC has collected mature seeds from native stands on the Northern Virginia-Washington D.C. border in November. Seed heads can be cut into a paper or cloth bag or seeds may be directly shaken from the heads into a bag.

Seeds are harvested from the 3 production rows at the NPMC in late October. Seed heads are cut off and allowed to air dry in a paper bag. The heads are run through a hammermill to remove

hairy fluff from the seeds; seeds and chaff are separated in a table top 2-screen clipper. The cleaned seeds are stored dry in cloth bags at 35°F until needed.

## **ESTABLISHMENT AND MAINTENANCE**

The NPMC has used seedling transplants as a means of establishing New York ironweed. Seeds are sown in 392-cell trays (TLC Polyform Inc., Minneapolis, MN) with a commercial germination mix. Stratification for 4 weeks at 40 °F improved seed germination at the NPMC and is generally recommended (Martin, 1990). Seeds germinate 1 to 2 weeks after sown trays are removed from cold and placed in the greenhouse. After 4 weeks of growth, seedlings in 392-cell trays are transplanted into Ropak Multi-pot #2 containers (Steuwe & Sons, Corvallis, OR) for dibble planting at revegetation sites. The NPMC uses a commercial peat : perlite mix and a time-release fertilizer in all seedling trays. A soluble fertilizer (20-18-18) is applied twice a week to young plants in the greenhouse. Multi-pot plugs are ready for the field in approximately 12 to 13 weeks.

There is no information regarding direct seeding rates, but Phillips (1985) suggests New York ironweed can be direct seeded into a prepared outdoor flat in early summer.

Maintaining the three production rows of New York ironweed at the NPMC entails hoeing around plants to reduce weeds. The pre-emergent herbicide trifluralin (tradename: Treflan, produced by DowElanco, Indianapolis, IN) is used after hoeing to prevent weed seed germination.

## **SEED PRODUCTION**

Three 30-foot rows (136 plants) of New York ironweed established from plugs at the NPMC in spring 1996 produced 1/5 pound of seed the following year.

The average number of seeds per pound is 480,000.

## **REFERENCES**

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