

# Protocol Information

Natural Resources Conservation Service -  
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United States Department of Agriculture

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Family Scientific Name: **Asclepias**

Family Common Name: **Milkweed family**

Scientific Name: *Asclepias tuberosa L.*

Common Name: **Butterfly milkweed**

Species Code: **ASTU**

Ecotype: **Monongahela National Forest**

General Distribution: **Butterfly milkweed is widely distributed throughout most the continental US. It is not known to be present in a few states in the northwest corner of the US.**

Known Invasiveness: **Not know to be invasive in the US.**

Propagation Goal: **Plants**

Propagation Method: **Seed**

Product Type: **Container (plug)**

Time To Grow: **6 Months**

Target Specifications: **A well developed plant suitable for transplanting with at least 12" of top growth and a healthy root system.**

Propagule Collection: **Seed pods were collected from multiple existing populations within the boundaries of the Monongahela National Forest to ensure genetic diversity.**

Propagule Processing: **Seed pods were placed in a breathable cloth bag to allow for air drying. Seed pods were opened to remove the enclosed seeds. The seeds were cleaned**

by hand to separate the seeds from the fluffy hairs.

Pre-Planting Treatments: **No pretreatment was necessary.**

Growing Area Preparation/

Annual Practices for Perennial Crops: **Pro-mix BX with biofungicide was moistened and placed in heavy plastic trays. The soil was compacted somewhat to prepare a firm seedbed.**

Establishment Phase: **Seed was spread evenly on the soil surface and then covered with 1/4 inch of additional soil. The top layer was pressed down slightly to ensure good seed to soil contact. The trays were placed in the cooler (34 degrees) for 30 days to allow for cold, moist stratification.**

Length of Establishment Phase: **1 month**

Active Growth Phase: **After cold stratification, The trays were moved directly to the greenhouse for germination. Seedlings began to emerge after about 2 weeks in the greenhouse. Once the seedlings had developed sufficient root systems, they were transplanted into quart plastic containers filled with Metro-mix 510 growing media.**

Length of Active Growth Phase: **5 months**

Hardening Phase: **Plants were moved to the shadehouse to allow for hardening off before shipping.**

Length of Hardening Phase: **2 weeks**

Harvesting, Storage and Shipping: **Plants with sufficient top growth and root development were shipped back to the Monongahela Nation Forest for transplanting. Trailers were covered with tarps to reduce excessive damage from wind burn.**

Length of Storage: **1 day**

Outplanting performance on typical sites: **Butterfly milkweed grows in dry fields, abandoned farmlands, beside roadways and other open areas. It prefers sandy, loamy or rocky limestone soils in full sun.**

References: **USDA, NRCS. 2012. The PLANTS Database (<http://plants.usda.gov>, 12 July 2012). National Plant Data Team, Greensboro, NC 27401-4901 USA.**

#### **Citation:**

Lester, Randall; Vandevender, John. 2014. Propagation protocol for production of container *Asclepias tuberosa* L. plants; Natural Resources Conservation Service - Appalachian Plant Materials Center, Alderson, West Virginia. In: Native Plant Network.

URL: <http://www.nativeplantnetwork.org> (accessed 23 June 2014). Moscow (ID):  
University of Idaho, College of Natural Resources, Forest Research Nursery.