# SPECIALIST NURSERY PRODUCTION AT CRÛG FARM

# CALU DEMONSTRATION FARM FACTSHEET March 2009



#### INTRODUCTION

Crûg Farm is a nursery for rare and unusual ornamentals plants. It is situated just outside Caernarfon in North West Wales. Previously the farm produced beef and cereals. The transition to horticulture began in 1991.

Crûg is owned and run by Sue and Bleddyn Wyn Jones. They travel the globe in search of rare and unusual plants to cultivate. Many of the plants at Crûg Farm have never been seen in cultivation before. Sue and Bleddyn hold a licence that allows them to bring seeds and plant material into the country from the Far East, The Middle East, South



Field grown ornamentals

America and Asia. All seeds and plant materials that are brought back must be guarantined for 12 months after entering the UK.

# SITE

Crûg Farm is approximately 60m above mean sea level and less than a mile from the Menai Strait coast. The site is in a very windy location. The natural soil is a clayey loam - although many plants are grown in purpose made growing media, rather than directly in the soil.

In such windy locations shelter is essential. Therefore, extensive use is made of trees and hedging to surround and shelter the site. Some of the trees on site were planted under the Better Woodlands for Wales scheme. The woodland also provides a degree of shelter from extremes of temperature and many plants are grown in the dappled shade of the woodland areas.

Some stock is planted out in the field before selling on. There are mixed environmental conditions in the field used: one end is very wet, the other much drier. These different environmental conditions are utilised to their advantage when planting out. Larger plants and moisture loving plants are planted in the wetter areas.

# **PROPAGATION**

As Crûg is working with such unusual plants, there are no established propagation norms. Most propagation at the site is via seed, although other techniques are also used.

A unique method of seed germination has been developed at Crug utilising plastic margarine tubs with clear lids. Seeds are sown into vermiculite in the tubs. The tubs are stacked in crates in a sheltered spot and are checked once a week during the winter and twice a week during the summer months. The pots are watered once a year. Some seeds can take up to eight years to germinate, so it is vital that accurate records, linked to labelling on the tubs, are kept. The clear lids make it easy to see when seedlings emerge. As soon as they have emerged, seedlings are pricked out and transferred into a double skinned polytunnel for growing on.







Livwodraeth Cynulliad Cyn Velsh Assembly Gove

Initially, most of the seed used for propagation is imported. However, certain plants are also grown as mother plants, providing an on-going source of seeds for propagation. The mother plants are kept in a separate field from the main production area, in order to reduce the risk of hybridisation.

# **GROWING IN TUNNELS**



Extensive use is made of polytunnels of all shapes and sizes. Each tunnel is set up to provide different temperature, light/shade and water requirements. One of the polytunnels is completely shaded for shade tolerant species. Gas is used to heat some of the tunnels and some have twin skins to provide additional insulation. Good ventilation in the polytunnels is vital for plant health. Crûg makes use of tunnels with detachable sides to allow maximum air circulation during the summer. Within the tunnels plants are grouped according to light, heat and water

requirements. The overhead irrigation systems use mains water which has been filtered to remove chlorine. Each sprinkler has its own valve to allow for maximum control. In the summer the irrigation is automated; at other times of the year, it is manually managed according to plant requirements.

#### **GROWING IN THE FIELD**

Many of the plants at Crûg are planted outside in the field. The areas used are first sprayed off to kill the grass. They are then ploughed and rotovated twice. This field system keeps costs down and frees up space for the plants that need the controlled environments of their polytunnels. Field grown plants also require less labour inputs and generally produce hardier plants than pot growing does.

## PESTS AND DISEASE

The use of chemicals is kept to a minimum at Crûg. Most routine weeding at Crûg is done manually, and a small quantity of slug pellets is used. Beneficial animals (e.g. hedgehogs) and insects (e.g. beetles) are encouraged by the use of windrowed thinning materials from the woodland placed throughout the site. The woodland is attractive to birds and they too help to keep insect and mollusc pest numbers down. Mice and voles are a problem in the polytunnels; and are controlled through baiting with poison. Squirrels and rabbits present challenges to the site. They are mainly controlled through shooting and the use of dogs.

## MARKET

Although plants are sold directly to the public from a sales area on site, the majority of trade is via mail order sales (increasingly ordered via Crûg's on-line shop). The mail order has been very successful, and a unique packaging system than enables plants of various shapes and sizes to be delivered throughout Europe has been developed.

Unusual and specialist plants will always have a good market. When certain plants become more popular this can lead to a drop in price, if this occurs Crug Farm look for alternative unusual ornamentals they can market. There is always a good market for those that flower early. Scented plants and fruiting plants are also good sellers. Bigger plants demand a higher price. One advantage of seed based production is that plants are more likely to fruit, making them more attractive to the buyer.

For more information about Crûg Farm Plants and to view their catalogue, visit www.crug-farm.co.uk

Whilst every effort is made to ensure the information provided in this leaflet is correct, CALU cannot be held responsible for the consequences of any actions taken on the basis of its content.

www.calu.bangor.ac.uk CALU – Supporting Sustainable Land Use