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**CALU's subject areas:**

- Horticulture
- Bio-energy
- Alternative crops
- Alternative livestock
- Farm woodlands

**Planting under way at Henfaes**

With the arrival of spring, staff at Henfaes have been busy sowing, planting and dividing a wide range of plants. 2008 will see a considerable expansion in the range of demonstrations at the Research Centre.

**MISCANTHUS DEMONSTRATION SITE**

For the first time, we have put in a plot of Miscanthus (Elephant Grass). The rhizomes were sourced from ADAS in Cambridgeshire and arrived at Henfaes on Friday 4<sup>th</sup> April.

The site had been prepared late summer / early autumn for an experimental crop that failed. As a result, it was weed free and had also been rabbit fenced. Prior to planting the area was disc harrowed.

Because only a small (c. 0.2ha) area was being planted, it was done by hand. The heavy, stony soil at Henfaes made this hard going, but eventually all the rhizomes were in.

This area will provide a site for a variety of demonstrations and inves-

tigations over the coming seasons. It will be one of the few sites in north Wales where a stand of Miscanthus can be seen. And although it is only a small area, it will provide opportunity to monitor the success of the crop and the ease, or difficulty, of managing it.

**LAVENDER PLOTS**

As lavender is a crop that CALU has received a considerable number of enquiries about, we have decided to put in a few hundred lavender plants. Micro-modules of the varieties Hidcote and Munstead were sourced from Thompson and Morgan.

These varieties were chosen as they are two of the most commonly planted varieties, but there is a lack of good guidance on which is the most suitable for the conditions in north Wales.

The micro-module plants were potted into 9cm pot as soon as they arrived at Henfaes. They are now growing on in a cold glasshouse, and the plan is to plant them into the

field towards the end of June, weather permitting.

**HERBS and SPICES**

Since CALU began, it has demonstrated quite a wide range of herbs that can be put to a variety of uses: culinary, medicinal, industrial and for plant protection. This year, we have expanded the range.

Most of the seeds have been sourced from E W King and Sons. One of the themes we will be demonstrating this year is herbs and spices that are common in the kitchen, but are not so commonly grown (e.g. caraway and cumin).

In addition, we are trialling some herbs that have specific medicinal properties, and others that are used in the production of plant protection products (e.g. pyrethrum).

Hopefully, a wide range of herbs will be on display at our shows and events throughout the coming year.

**CALU and Farming Connect—latest news**

As many of you will know, the Farming Connect service of the Welsh Assembly Government is due to be re-launched this summer.

Selection of the partners who will deliver the service is being conducted via a formal competitive tendering process. The CALU partnership has submitted a bid to continue delivering the Development Centre programme covering areas broadly similar to those we have covered up until now. These are: horticulture / novel crops, bio-energy and alternative livestock. The new programme will also specifically

include cereals, but will exclude general woodland management (although the use of woodlands for fuel production will be included).

Tenders for the new service were submitted to the Assembly by 1st April 2008. It is anticipated that a decision on the future deliverers will be made sometime during May.

In the meantime, CALU has interim funding from the Assembly to continue delivering a limited range of knowledge transfer activities during April and May 2008.

## Want to know where to buy vegetable plugs?

Now that spring is hopefully here and it is time for planting, CALU is receiving lots of enquiries about where module grown vegetable plants can be purchased. We have put together a list of suppliers

who have confirmed that they have stock available, and that they deliver to Wales. Please have a look at the list below.

Company	Contact details	Phone	Location
<b>The Plantsmiths</b>	www.plantsmiths.co.uk	01597 851 662	Landrindod Wells
<b>Plant connection</b>	www.plantconnection.co.uk info@plantconnection.co.uk	01243 530 790	Chichester
<b>Thompson &amp; Morgan</b>	www.thompson-morgan.com ccare@thompson-morgan.com	01473 688 821	Suffolk
<b>Suttons</b>	www.suttons.co.uk	0844 922 2899	Paignton, Devon
<b>Kernock</b>	www.kernock.co.uk	01579 350 561	Cornwall
<b>Elsoms</b>	www.elsoms.com seeds@elsoms.com	01775 715000	Lincolnshire
<b>Quantil</b>	www.quantil.co.uk	01695 573245	Lancashire
<b>Kingsplants</b>	www.kingsplants.co.uk info@kingsplants.co.uk	01376 570000	Essex
<b>Marshall seeds</b>	www.marshall-seeds.co.uk	01480 443390	Cambs
<b>Dobies</b>	www.dobies.co.uk	0844 701 7625	Devon

### DID YOU KNOW...

The term 'biomass' covers all animal and plant matter on the earth's surface. 'Bio-energy' is used to describe heat, electricity and automotive energy generated from crops, trees or agricultural waste.

Source: Energysavingwales

## Energy use in agriculture & horticulture

Warwick HRI recently published a report entitled "Direct energy use in agriculture: opportunities for reducing fossil fuel inputs".

The report reviews analyses and estimates generated by other authors and agencies, and then suggests actions which can be taken to reduce energy usage.

Protected cropping and cereal production are the two categories reported as having the highest direct energy inputs, representing 26% and 25% of agriculture's total.

Most of the energy used in UK agriculture systems comes from oil – either for mobile operations (i.e. fuel for tractors, combines and other vehicles) or for heating.

Recommendations in the report largely mirror those of CALU's publication "Managing Energy and Carbon". For example, ensuring equipment is properly serviced and maintained, using adequate insulation for buildings and pipework, using thermal screens in glasshouses. However, the report focuses on the whole of the agricultural

industry throughout the UK, rather than providing examples and data relevant to specific sizes of enterprise. The full report can be found at: <http://www2.warwick.ac.uk/fac/sci/whri/research/climatechange/energy/>



**Using the appropriate technologies in glass houses can reduce emissions from fossil fuels and save money.**

## New consultation for healthier bees

Most of us associate bees with honey. But we should not forget that there are plants relying on pollination by bees. In the UK, approximately £120m – £200m worth of crops each year rely on bees for pollination (Source: Defra). And, as the end consumer we also rely on the bees.

Since the occurrence of the Varroa Mite in the early 1990s British beekeepers have faced a constant challenge to sustain their colonies. And experts anticipate that there are more challenges to come. It is thought to be only a question of time before the small hive beetle (SHB) and *Tropilaelaps* (a parasitic mite) will be introduced to Britain.

To address these emerging challenges

the Welsh Assembly Government and Defra have launched a new consultation: “a draft strategy on protecting and improving the health of honey bees in England and Wales”.

The aims of the strategy are: to achieve a sound communication between all stakeholders involved; and the reduction of pests and other threatening conditions through good standards of beekeeping and high biosecurity measures. The document also suggests that extensive research and science will be undertaken to provide a basis for bee policies and their implementation.

As this topic involves a wide range of stakeholders, Defra and WAG are looking for feedback. If you want to

give input towards the paper or if you want a copy of the consultation papers see <http://www.defra.gov.uk/hort/Bees/dorder/index.htm>.



Photo: USDA

## Bees at Henfaes

During 2006, CALU and Henfaes hosted bee hives belonging to Pete Barrar and Pete McFadden of the Conwy Bee Keepers Association. These bees produced some delicious Henfaes Honey.

In 2008, we are hoping to establish our own colony of Henfaes honey bees. To this end, Felizitas Rupp has been attending the CALU sponsored bee keeping course and we have recently acquired a beekeeping outfit and some of the necessary

equipment. Our plan, with the assistance of Pete Barrar, is to attract a colony of bees to Henfaes.

At the same time, in order to be able to better promote and demonstrate bee keeping, we have bought a bee hive and a range of bee keeping equipment to take to shows and events with us.

If you are interested in learning more about beekeeping, contact CALU or the Welsh Bee Keepers Association ([www.wbka.com](http://www.wbka.com)).



Felizitas trying on her new beekeeping outfit.

## A short guide to a long story—Climate Change

Have you ever asked yourself how to estimate the greenhouse gas (GHG) emissions for your business? There are an increasing number of on-line calculators available to help you. A **carbon footprint** calculator is a tool to estimate GHG production from a given process. The process could be your lifestyle (the things you consume, the way you travel, the waste you create); or the production of a particular item (e.g. carrots); or

of a whole production site (the farm).

Although the name suggests otherwise, a carbon footprint not only considers carbon dioxide but all GHGs. At this point in time, there is no European or global standard procedure to calculate a carbon footprint. A considerable amount of research and effort is being put into the development of standards.

However, GHGs are not the only

deleterious outputs from processes.

If you want to take a broader view and look at impacts beyond GHGs (such as toxicity to humans, radiation, habitat loss) you might want to consider a **Life Cycle Assessments (LCA)**. This aims to estimate a wide range of environmental impacts of a product from its creation to final disposal—the “cradle-to-grave” approach.

## CENTRE FOR ALTERNATIVE LAND USE

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Supporting sustainable land use in Wales



## Forthcoming Events

**Monday 28th April 2008**—CALU Herb Production Workshop, “Herbs from Wales”, Llanerchymedd, Anglesey

**Thursday 1st May 2008**—Promoting Pig Production in Wales, CALU & HCC Seminar, Henfaes Research Centre, Abergwyngregyn, Gwynedd

**Wednesday 14th May 2008**—Herb Production and Processing Workshop, *Avicenna*, nr. Lampeter

For more information about any of CALU's events, please contact us.

We are now planning events for 2008. If you have any ideas for events, or suggestions of venues that would provide a good site for a workshop or open day, please get in touch.

## About CALU



CALU is the Farming Connect Development Centre for alternative land uses. CALU exists to transfer information and technology within the areas of:

- Horticulture
- Bio-energy
- Alternative Livestock
- Alternative Crops
- Farm Woodlands

CALU has three dedicated members of staff and a network of associate specialists covering all the topics within CALU's remit.

### CALU ACTIVITIES:

- Open days
- Demonstration events
- Technical leaflets
- Training days
- Press articles
- Crop information sheets
- Project reports
- Talks
- Producer groups
- Agricultural shows
- Information booklets

### CALU PARTNERS:

- Bangor University
- Welsh College of Horticulture
- ADAS
- Coed Cymru
- Coleg Llysfasi

