

## A HANDY TECHNIQUE FOR A PROMISING BIOFUEL CROP

**Cîmpeanu Ghe., Monica Enache, Carmen Cîmpeanu**

University of Agricultural Sciences and Veterinary Medicine of Bucharest, Faculty of Biotechnology,  
Bd. Marasti 59, Sector 1, Bucharest, Romania, email: [carmencimpeanu@yahoo.com](mailto:carmencimpeanu@yahoo.com)

### SUMMARY

*Miscanthus* is a genus of "woody" rhizomatous perennial grasses, growing to 3 - 4 m in height. It produces new shoots annually which produce erect, robust stems and appear similar to thin bamboo cane, having a diameter of approximately 10 mm. Most *Miscanthus* species are native to subtropical and tropical regions of Africa and southern Asia, with one species (*M. sinensis* Anderss. (Chinese silvergrass)) extending north into temperate eastern Asia.

The sterile hybrid between *M. sinensis* and *M. sacchariflorus*, *Miscanthus giganteus* (Giant Chinese Silver Grass), has been trialed as a biofuel in Europe since the early 1980s. Its dry weight annual yield can reach 25t/ha.

These high yields prove that the *Miscanthus* has the potential to make an important contribution to the to energy generation from renewable sources. Commercial generation projects using biomass power have now commenced around the UK and EU with more due to come on stream over the next few years.

*Miscanthus* do not produce viable seed. In order to propagate large numbers of plantlets for several thousand acres of biomass to be planted, tissue culturing is being used and some companies have already patented some exclusive micropropagation processes.

We present here the application of our simple micropropagation method developed for the rare ornamental *M. sinensis* "Yakushima" previously (Enache, 2003), to the giant miscanthus plants.