

# Elephant grass

Miscanthus spp.

### **About me:**

I am a fast growing perennial grass and can reach a height of 3 meters (12ft). I like most free draining soil types. I flower on rare occasions when conditions are right. Due to my fast growing nature I don't require any fertilizers or pesticides so I am considered an environmentally friendly option.

#### Where do I come from?

Originally I came from Japan and regions within Tropical Africa. I was introduced into Europe in the 1930's.

## How is the bio-fuel produced?

Once ready, I am harvested in the autumn. Firstly the plant material (biomass) has a pre-treatment phase which separates the lignin, cellulose and hemicelluloses using enzymes. Once this process has been completed the biomass is then fermented using yeast and distilled to remove any excess water. Lastly it is refined to produce bio-ethanol or taken to a mill to make fuel pellets

## How my energy used?

As direct combustion (fuel pellets and briquettes can be used for heating and electricity) or co-firing with coal, straw or wood. The bio-ethanol can also be used to fuel cars with adapted engines.



Image taken by Garance Wood Moulin (2014)



Image taken by UGA College of Agriculture and Environment (2012) USA



Image taken by Garance Wood Moulin (2014)
RGB Kew UK

