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[\[Energy\] Wild Grass A Future Energy Source: NCKU Scholars](#)

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NCKU News (2011/11/07) Wild Miscanthus, a long perennial grass common in Taiwan but considered as weed, may become a sustainable and environmental-friendly energy source, scholars at National Cheng Kung University (NCKU) said.

As the world is faced with a serious resources shortage, the search for alternative energy should be a nation's top priority, said Tzen-Yueh CHIANG, Professor at Life Sciences, and Wen-Teng WU, Director at the Energy Research Center.

CHIANG said that Miscanthus, sometimes known as the elephant grass, has already been used in Europe for energy generation but has been undervalued in Taiwan because it's not considered as cash crop.

Based on an Irish study, he said, if 10 percent of growing land in Europe is planted with Miscanthus, it can generate about 9 to 10 percent of total electricity needs in the European Union countries and also reduce carbon dioxide levels through photosynthesis.

"Taiwan actually possesses valuable varieties of Miscanthus that many countries seek to obtain, owing to its rapid growth, low mineral content and salt-proof characteristic," the professor said. "As a potential renewable fuel source, this grass can be used to save energy and reduce carbon emissions."

According to CHIANG's research, Miscanthus condensatus found at the east coast of Taitung County, Miscanthus floridulus commonly found at medium elevations and Miscanthus sinensis Andress at Taipei basin have finest biomass and hence are very good candidates for alternative energy sources. The genetic studies on these species can lead to new species with higher (perhaps triple of quadruple) biomass.

Now Taiwan Agricultural Research Institute has begun the cultivation of the wild grass and the harvest frequency has become once a month from the original frequency, once a year. The grilling equipment and technology developed by NCKU's Energy Research Center has also entered the stage of patent application.

Related Historical Message:

[\[Energy\] Taiwan's Biodiversity Advantage Is Suitable for Developing the Sustainable Alternative Energy Crop – Miscanthus Sinensis 2011/05/25](#)

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[NCKU News 2011/11/07](#)

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[National Science Council International Cooperation Sci-Tech Newsbrief](#)

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