

AFP

Irish scientists probe seaweed power

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DUBLIN (AFP) — Ireland could become a key player in the production of biofuel from seaweed, scientists told a conference in the west of the country on Monday.

Seaweed has long been investigated as a potential source of bioethanol, which is typically made from crops such as sugar cane and corn, but technological barriers remain to its commercial use.

With rich seaweed resources, "Ireland is poised to become an important player in the next generation of biofuel production," said Stefan Kraan, head of the Irish Seaweed Centre at the National University of Ireland in Galway.

"Algae do not have the negative image of terrestrial biomass resources, which are said to be responsible for higher food prices, impacting on water use, biodiversity and destruction of rain forest," he said.

The annual conference of the International Society for Applied Phycology (the scientific study of algae) is examining the economic and social aspects of using brown seaweeds for bioethanol production.

Professor Michael A. Borowitzka from Murdoch University in Australia told the conference that compared to other bioenergy crops such as rapeseed, peanut or palm oil, there are a number of species of algae that have a higher oil content and can grow in seawater.

"These apparently very favourable properties have generated a frenzy of interest and activities in the field of energy production using algae, both microalgae and seaweeds," he said.

"For biofuel production the algal biomass needs to be produced at a cost of around one dollar or less per kilogramme. In order to achieve this ambitious goal there is the need for year-round reliable high productivity algal culture and all factors need to be optimized and efficiently integrated."

Ireland has 16 commercially useful seaweed species, with additional species being added as more research is carried out.

They are currently used in areas such as food production, fertilizers, soil conditioners, cosmetics, medical preparations, biotechnology and biomedicine.