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## New Study Predicts Yield for Biofuel *Jatropha*

July 1, 2010 - [Wiley-Blackwell](#)

Champaign, IL- An article in the current issue of *Global Change Biology Bioenergy* predicts the yield of the biofuel crop, *Jatropha curcas L.*, for present and future climates.

Researchers related reproductive potential with the natural occurrence of *Jatropha*, with biogeographic modeling and ecological principles. This model allowed them to estimate yield response to climate factors and map worldwide productivity for present and future climates.

They used a novel fitness-based modeling approach because agroclimatic and physiological data on *Jatropha* is limited.

In their article, "Global mapping of *Jatropha curcas* yield based on response of fitness to present and future climate," Antonio Trabucco and colleagues point out that *Jatropha* grows in a wide range of climatic conditions, including tropical and subtropical areas with limited suitability for intensive cropping.

*Jatropha* requires higher annual precipitation to achieve significant biofuel production than previously thought. In addition, the study shows that climate changes over the next decade will lead to decreased yields in zones with reduced precipitation and increased yields in regions with reduced frost risks.

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