**Title: Biofuel production on the margins**

This article is about the research conducted by Gelfand et al, recently published in “Nature”, and shows that certain wild plants, growing on unused lands which are unsuitable for farming, can be used as a biofuel crop.

The authors compared the many aspects such as biofuel yields, greenhouse-gas emissions, changes in soil-carbon stocks, and energy consumption asso­ciated with field operations for six biofuel-cropping systems in the mid-western United States over a 20-year period.

The results obtained for this study demonstrates that the greenhouse-gas mitigation of these wild plants that naturally regrows uninhibited land which are of very low productivity was significantly higher than that of intentionally grown crops, such as: maize, alfalfa, poplar and a maize– soya bean–wheat crop rotation and that their energy production was comparable. The data also proves that moderate levels of nitrogen fertilization could further increase biofuel yields of the wild vegetation system by about 50%, with only a small increase in nitrous oxide emissions. Another advantage pointed out was that such native methods over other biofuel crops is that they can be productive even under bad soil and climate conditions.

Thus, cultivation of these field crops can significantly improve United States biofuel production.

**Reference**: Butterbach-Bahl, Klaus, and Ralf Kiese. "Bioenergy: Biofuel production on the margins." *Nature* 493.7433 (2013): 483-485.