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**Renewable organic resources for biodiesel production**

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The scarcity of known petroleum reserves will make renewable energy resources more attractive. The world energy demand continues to increase. The most feasible way to meet this growing demand is utilizing alternative fuels. One such fuel that exhibits great potential is biofuel, in particular, biodiesel. Biodiesel is defined as the monoalkyl esters of vegetable oils or animal fats. Biodiesel is the best candidate for diesel fuels in diesel engines. The biggest advantage that biodiesel has over gasoline and petroleum diesel is its environmental friendliness. On the other hand, biodiesel probably has better efficiency than gasoline. The major economic factor to consider for input costs of biodiesel production is the feedstock, which is about 80% of the total operating cost. The high price of biodiesel is mainly due to the high price of the feedstock. Ever increasing environmental concerns and several socioeconomic aspects accelerate the investigations of alternative fuels in diesel engines. In near future, biodiesel fuels such as ethyl or methyl esters from soybean oil, rapeseed oil, sunflower oil, etc. offer a potentially very interesting alternative regarding harmful emissions, engine wear, cost, and availability. This paper is a review of the application of biodiesel and investigates how the biofuel is produced from agricultural products and losses products and shows that the usage potential of biodiesel in Iran and the world.

**Keywords:** Biodiesel, Renewable organic resource, Alternative fuels, Agricultural product

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