

Did You Know That Jatropha Seedcake Has a Higher Value Than Compost

The production of oil from Jatropha seed inevitably results in a **by-product of press-cake with a high percentage of protein** 58 to 64% crude protein (53-55 % true protein content), and the level of essential amino acids except lysine is higher than the FAO reference protein.

According to the Wright State University study, trials with Jatropha seedcake have concluded that **its properties compare favorably with those of other organic fertilizers** with regard to Nitrogen, Phosphorus and Potassium.

In many parts of the world, we are finding that some farmers are probably more interested in the Jatropha seed cake than they are with the oil. **The seedcake is widely known as a very valuable form of fertilizer** equivalent in fertility to chicken manure. Farmers involved in traditional oil processing carefully guard the seedcakes and use them to fertilize rice fields as well as up-land crops. Some farmers are also using the seedcakes to fertilize coffee plants. They did comparison trials and found Jatropha to be extremely interesting compared to more traditional forms of organic fertilizers like mulching or use of cow manure.

Business Simulation

Thanks to its mineral contents of Nitrogen (6%), Phosphorous (2.75%) and Potassium (0.94%), the press cake can be used as an organic fertilizer. You can see that Jatropha seed cake has a good scoring among organic fertilizer.

Fertilizer	Nitrogen (%)	Phosphorus (%)	Potassium (%)
Jatropha Curcas press cake	6.0	2.75	0.94
Cow-Manure	0.97	0.69	1.60
Chicken manure	3.04	6.27	2.08
Compost of raw straw	0.81	0.18	0.68
Compost of municipal	1.25	0.25	0.65

As you can notice, Jatropha has a higher value than compost so there is an opportunity to sell Jatropha seedcake in the gardening industry. A good strategy could be to sell it at the same price than compost but knowing that Jatropha seedcake is 3 times more effective. We could say that among compost product, Jatropha seedcake is the leader.

The Revenue Simulation

The retail price of an organic compost bag of 40 lb is near \$3.5.

How many bags of Jatropha Fertilizer you can produce in 1 ha?

If the yield in 1 ha is 2 tons of seeds, after oil extraction you can collect about 1.5 tons of seedcakes.

When your Jatropha plantation measures 50 hectares the quantity of seedcakes obtained after oil processing is 75 tons.

What kind of income could you expect with Jatropha seedcakes?

75 tons = 3750 bags of 40 lb
Sales price of one bag fixed at \$3.5

Revenue	Unit price (USD)	Qty	Total
JatroFertilizer (40 lb bag)	3,5	3750	13125
Total			13125

If the margin is 50% with this new business line, the profits generated could cover almost 25% of annual maintenance costs of the plantation. REMINDER : Maintenance cost for one hectare of Jatropha is about \$500. This cost can be higher when you need to irrigate your plantation.

[I Want To Learn More About Gardening Fertilizers And Compost !](#)