

# Physical characteristics and chemical constituents of *Jatropha cinerea* seeds

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*Jatropha cinerea* is a wild native plant from northwestern Mexico characterized by adapting to subtropical and dry climates (with rainfall below 200 mm) with long periods of drought. It grows in saline soils along the coast and in rocky areas. It has been reported that the seeds of other species of the same genus contain oil with great potential for biodiesel production. The presence of antioxidant compounds has also been reported in the oil and other tissues of *Jatropha* species. However, this is the first study that reports phenolic compounds in *Jatropha cinerea*. The aim of this study was to evaluate the chemical composition of *Jatropha cinerea* seeds. The seed of this species showed 36.54±0.77% oil. The major fatty acids in the oil from *Jatropha cinerea* seeds were oleic and linoleic acids. Furthermore, 220.01±15.15 ppm of gamma tocopherol in the *J. cinerea* oil was detected. On the other hand, carotenoids were not found. The phenolic compounds identified in kernel meal from *Jatropha cinerea* were benzoic acid, coumaric acid, vanillic acid, gallic acid, caffeic acid, ferulic acid, sinapic acid, epi-catechin, and quercetin.

**Keywords:** Fatty acids; *Jatropha cinerea*; Oilseeds; Phenolic compounds; Tocopherols

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