Phenotypic variability and seed yield of eight provenances of *Jatropha curcas* L. introduced in Tunisia

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Eight provenances of *Jatropha* were sown in the south of Tunisia (Gabes) in order to study their development under local conditions with an emphasis on differences between accessions. Traits observed included general aspects of plant development, leaf characteristics and seed traits. Morphological analysis of seeds included seed image area, perimeter, length/width ratio, circularity index and J index. J index reflects the similarity of seed images with an ellipse showing differences in seed shape between accessions. *Jatropha curcas* genotypes introduced in Tunisia are polymorphic, their seed yield is low and variable between genotypes. Seed morphology analysis may give an indication in relation with the productivity in some of the accessions. The comparative agronomic studies are crucial before early selection.