

Seed and Fruit Variability in *Pongamia Pinnata* (L.) Pierre from Konkan Region of Maharashtra

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ABSTRACT *Karanj* (Leguminosae, subfamily Papilionoideae) is a medium sized tree. Native to humid and subtropical environments, mature trees can withstand water logging and slight frost. A thick yellow-orange to brown oil is extracted from seeds. The oil has a bitter taste and a disagreeable aroma, thus it is considered as non- edible oil. In India, the oil is used as a fuel for cooking and burning of lamps. The oil is also used as a lubricant, water-paint binder, pesticide, and in soap making and tanning industries. Seeds of *Karanj* have about 30-35 percent oil and upto 27-28 percent oil can be expressed in crusher and most of the physical and chemical properties of the oil are almost similar to those of the diesel. Twenty seed sources of *Pongamia pinnata* were collected from Konkan region of Maharashtra from different agro climatic zones. Pod length varied from 14.50 mm to 69.69 mm and Pod thickness also varied significantly among all seed sources. Avg. pod weight varied from 2.80 g to 7.64 g. Maximum value for seed length (27.75 mm) was observed and maximum avg. seed weight (3.18 g) was recorded. The seed thickness varied from 5.00 to 10.00mm. The oil contain varies from 31.17 to 42 percent was recorded. The variability in seed source attributes is largely attributed to the heterogeneity of the genotypes and the genotype X environment interactions.