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Genetic variation in *Dipteryx alata* progenies in Brazil**Wanderley Santos¹, Miguel Luiz Menezes Freitas²,
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Dipteryx alata is a species highly potential for silvopastoral systems due to its canopy structure and abundant fruit production used in cattle feed. This species can also be used in landscaping, as timber in shipbuilding, building and its seeds used as food by humans in its natural occurrence region particularly in Central Brazil. The aim of this study was to estimate genetic parameters in a progeny trial of *Dipteryx alata* established in municipality of Perdeneiras, Brazil (Estação experimental do Instituto Florestal de São Paulo). This trial was established in 1986 in a completely randomized design with 2–8 replications. Plots were fitted linearly, comprising 5 plants in a spacing of 3.0 × 3.0 m. Data of the diameter at breast height (dbh) were analyzed using the REML/BLUP statistical procedures. At 27 years old progenies showed an average dbh of 16.8 cm. Analysis of deviance revealed significant differences among progenies at 1% probability level for diameter at breast height. The coefficient of variation among progenies for dbh was 10.54% and individual narrow-sense heritability was 12.33%. The variability in the present trait may be exploited in genetic conservation and pre-breeding programs in order to support the seedlings production to supply programs for environmental restoration and production systems.