

GENETICS VARIATIONS IN PROGENIES TESTS OF *MYRACRODRUON URUNDEUVA* INTERCROPPED WITH *ASTRONIUM FRAXINIFOLIUM* AND *TERMINALIA ARGENTEA*

Theme: Biodiversity Conservation Indicators

MORAES, Marcela Aparecida de¹, MANOEL, Ricardo de Oliveira¹; OTSUBO, Helena de Cassia Brassaloti¹, SILVA, Alexandre Marques¹; CANUTO, Daniela Sílvia de Oliveira¹, FREITAS, Miguel Luiz Menezes de²; MORAES, Mario Luiz Teixeira de¹; SEBBENN, Alexandre Magno².

¹ Faculdade de Engenharia de Ilha Solteira – UNESP

² Instituto Florestal de São Paulo

Keywords: conservation strategies, seed orchard and genetic parameters.

The progenies tests are the most important, because provide conditions for knowing the genetic variation between and within families from the application of quantitative genetics, where are estimated genetic parameters for characters silvicultural, allowing the establishment of strategic conservation and production of breeding seeds, for seed orchard. Moreover, the tests allow inferences about the mating system, from the ratio between the variance estimates of variance within and between progenies. Thus, this work was aim to study the genetic variation among progenies of *Myracrodruon urundeuva* (aroeira) intercropped with *Astronium fraxinifolium* (gonçalo-alves) and *Terminalia argentea* (capitão do campo). In July 1993 they collected seeds from 28 open-pollinated trees located at Selvíria, MS and from three species of plants were installed on the progeny test using a randomized block design with 28 treatments (progenies), 4 replicates and 10 plants per plot for each species studied. At thirteen years of age silvicultural traits were measured: height (m), diameter of the canopy (DMC) and diameter at breast height (DBH). Estimates of genetic parameters were obtained from the *software* SELEGEM-REML / BLUP. The averages for all the traits were 8.58 m (height) 3.86 m (DMC) and 8.92 cm (DBH). The experimental coefficients of variation were good ranging from 10.75% (DMC) to 16.33% (DBH) and for test-f only the DMC did not show significance at 5% probability (1.97) among the progeny. The heritability values among the progeny ranged from 0.49 (DMC) to 0.79 (height) showing good genetic control in plants studied. The coefficients of genetic variation within families showed similar behavior, with 10.57% (DMC) to 23.32% (DBH). The accuracy ranged from 0.70 (DMC) to 0.89 (height) which indicates good correlation between predicted values and true, and finally the coefficient of variation was higher in relative height (0.96) being the most appointed to implement methods of genetic breeding. Thus, the characters studied showed a good level of genetic variability that allows for conservation strategies and breeding based on this population of *M. urundeuva*.

Apoio financeiro: FAPESP