10° SIMPÓSIO DE RECURSOS GENÉTICOS PARA A AMÉRICA LATINA E O CARIBE

ANAIS DO 10º SIMPÓSIO DE RECURSOS GENÉTICOS PARA A AMÉRICA LATINA E O CARIBE

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GENETIC VARIATION FOR GROWTH TRAITS IN PROGENIES TEST OF *PINUS CARIBAEA* VAR. *HONDURENSIS*

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Simpósio de Recursos Genéticos para a América Latina e o Caribe

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Pinus caribaea var. *hondurensis* is a tropical conifer widely planted in the world. This variety usually has a straight trunk, without excess branches and can reach 45 m in height and 135 cm dbh. The main objective was estimates the variability and performance of *Pinus caribaea* var. *hondurensis* progeny test. It was set up in June, 1986 in municipality Selvíria, Brazil. The trial was composed for 96 progenies and 4 commercial controls of *P. caribaea* var. *hondurensis*. The design was a 10 x 10 lattice triple, with 10 plants by linear plot with the spacing of 3.0 x 3.0 meter plants. Twelve years after the planting was done selective thinning all trial and left only six plants per plot. The remaining trees in each plot were evaluated for the following traits: total height and diameter at breast height. Quantitative variables were analyzed using the REML/BLUP procedure. Significant genetic variation was observed at 1 % probability among the progenies and individuals for dbh and height. The genetic variation among progenies coefficient was 4.50% and 31.4%, respectively for dbh and height. The estimates of narrow-sense individual heritability in plants were 0.25 to 0.31 for dbh and height, respectively. The heritability of average progeny showed high values for two traits. These results indicate genetic gains can be obtained with the application of different selection methods.



