



Correspondence between performance of *Eucalyptus* spp trees selected from family and clonal tests

C.A.F. Reis¹, F.M.A. Gonçalves¹, L.N. Rosse², R.R.G.F. Costa¹ and M.A.P. Ramalho¹

¹Departamento de Biologia, Universidade Federal de Lavras, Lavras, MG, Brasil

²Empresa Veracel S.A., Eunápolis, BA, Brasil

Correspondence author: F.M.A. Gonçalves

E-mail: avelar@dbi.ufla.br

Genet. Mol. Res. 10 (2): 1172-1179 (2011)

Received September 24, 2010

Accepted December 7, 2010

Published June 21, 2011

DOI 10.4238/vol10-2gmr1078

ABSTRACT. We examined the correspondence in performance between trees selected from a family test and their respective clones from a clonal test of *Eucalyptus*. Full-sib families were obtained from controlled pollination among individuals of *Eucalyptus grandis* and between *E. grandis* and *E. urophylla*. The hybridizations did not follow a factorial scheme. The family tests were carried out at three locations in Eunápolis and Itabela counties, in Bahia, Brazil, in 2003. Four hundred and ninety-seven high-performance trees were selected, by the individual BLUP procedure, in the family tests at two years of age, based on wood volume. The clones from these trees and 14 checks were evaluated in clonal tests carried out in the same region in 2006. The wood volume of the clones was evaluated at two years of age. Trait correlation between the trees selected from the family and clonal tests was low. The estimate of the coincidence between the best trees and the best clones using an average of the different intensities of selection was only 27%. These results demonstrate that the selection of trees in the family test should not

be too drastic; otherwise the chance plus clones may be overlooked.

Key words: Forest breeding; Clonal selection; Genetic correlation; Individual BLUP procedure; Genotypes by years interaction