

Radial basic density variation in different provenances of *Grevillea robusta* Cunn. Povia de Mattos, P., Martins, E.G. (Embrapa Florestas, Brazil; povia@cnpf.embrapa.br; emartins@cnpf.embrapa.br); Brand, M.A., Bittencourt, E. (Uniplac, Santa Catarina, Brazil; martha@uniplac.net; eduardo@uniplac.net).

Grevillea robusta Cunn. was introduced in Brazil at the end of the 19th century. It has been cited in uses as wind and frost protection, energy source, and solid wood. At this stage, it is important to introduce wood quality variables in breeding programs of *G. robusta*. The aim of this work was to estimate radial basic density variation in wood samples of different provenances of *G. robusta*. Samples were taken from seven-year-old trees, from a provenance test in the Itaipu Binacional area in Parana State, according to volumetric growth; considering excellent, intermediate, and slow growth. The samples were taken bark to bark from the central board, from the first log, making sub samples of 1 cm in the radial direction. Basic density was determined for each sub sample, and the radial variation percentage was established, considering the smallest and largest basic density value in the same ray. The average basic density was 0.47 g/cm³, and percentage of radial variation was 12.9%. There was variation of the radial basic density among provenances and progenies, but no correlation between radial variation of basic density and tree diameter was detected. More conclusive results should be obtained with a wider sample.