

Carbon biomass in tree rings of *Balfourodendron riedelianum* and *Esenbeckia leiocarpa*, in the Southeast of Brazil. Lisi, C.S., Tomazello Filho, M. (*University of Sao Paulo, Brazil; mtomazel@esalq.usp.br; cslisi@esalq.usp.br*), Botosso, P.C. (*Brazilian Forest Research Center/EMBRAPA, Brazil; botosso@cnpf.embrapa.br*).

Forest trees are recognized by their strategic importance in the assimilation of excess atmospheric carbon and several methods of wood-carbon biomass determination are available in the literature to calculate the carbon concentrations in different forest ecosystems. With this aim, *Balfourodendron riedelianum* and *Esenbeckia leiocarpa* trees, commonly found in semi-deciduous seasonal forest fragments in southeastern Brazil, were selected. The site is characterized by climatic seasonality (hot with rain during the spring/summer, and cold and dry during autumn/winter), inducing annual tree-ring formation due to cambium activity variation. A total of 59 trees of the two species were selected, and wood cores were extracted to determine the radial annual tree-ring thickness and their respective density by X-ray densitometry technique. With the wood biomass of annual tree-rings, the percentage of carbon/wood was calculated to determine the amount of carbon in of each individual tree-ring. To *B. riedelianum* and *E. leiocarpa* trees it was determined that during the period analyzed, the carbon assimilated in the annual tree-rings of both species increased in relation to tree age, with intra-inter tree ring variation.