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Efficiency of producing anion and relative humidity of the indigenous woody plants in Jeju islands

S.-G. Son (1), K.-J. Kim (2), H.-J. Kim (1), C.-M. Kim (1), and K.-O. Byun (1)

(1) Warm -Temperature Forest Research Center, Korea Forest Research Institute, Seogwipo, 697-050, Republic of Korea , (2) National Horticultural Research Institute, Rural Development Administration, Suwon, 441-440, Republic of Korea

This study is to evaluate the ability of interior plants to produce anion and relative humidity that can purify polluted indoor air. Four indigenous woody plants in Jeju islands such as *Sarcandra glaber* (Thunb.) Nakai, *Illicium anisatum* L, *Cleyera japonica* Thunb. and *Ilex rotunda* Thunb. were used. *Sansevieria trifasciata* cv. Laurentii was also used as a comparative plant. The amount of anion and increment of relative humidity produced by five species of indoor plants was assessed by anion measurement (ITC-201A)in a sealed acryl chamber (118×118×119.5cm).

The highest amount of anion was 515 ea/cm^{3}produced by *I. rotunda*. The amounts of anion were 293 ea/cm^3, 273 ea/cm^3, and 211 ea/cm^3 in *S. glaber*, *I. anisatum* and *C. japonica*, respecively while it was 220 ea/cm^3 in *S. trifasciata*. The increment of relative humidity was highest in *I. anisatum* as 27.4% while it was lowest in *S. trifasciata* as 14.0%. This result suggested that all four indigenous plants tested were more effective to purify the indoor polluted air than *S. trifasciata*.

Key words: interior plant, *S. glaber*, *I. anisatum*, *C. japonica*, *I. rotunda*, indoor polluted air