

Healing Effects of Foliage Plants Using Physiological and Psychological Characteristics

Ayako Sawada* and Takashi Oyabu¹

Japan Advanced Institute of Science and Technology, Asahidai, Nomi 923-1292, Japan

¹Kanazawa Seiryō University, Gosyo-machi, Kanazawa 920-8620, Japan

(Received March 8, 2010; accepted May 25, 2010)

Key words: office environment, physiological and psychological responses, foliage plants, salivary amylase, healing effect

Foliage plants serve as interior accessories and are placed in indoor spaces, such as offices, hotels, restaurants, and homes. Recently, their healing effects have attracted much attention. In this investigation, the healing effects of foliage plants on human subjects performing a computer task were examined by measuring salivary amylase activity, blood pressure, and pulse as physiological indices, and by using the profile of mood states (POMS, the Japanese edition) as a psychological index. The salivary amylase activities of the subjects working in a room with foliage plants were significantly decreased compared with those of the subjects working in a room without plants. When comparing average increase/decrease rates between cases immediately after and 30 min after task-loading, the rates of the salivary amylase activity, anger-hostility, vigor of the subjects in the cases with and without plants are -11.1 and 3.5% , -3.4 and 0.3% , and 3.2 and -0.6% , respectively. It is evident that foliage plants have healing effects on workers.

*Corresponding author: e-mail: sawa@po.incl.ne.jp