

# Psychological and Physiological Benefits to Rocky Leaf Prints Activity<sup>1</sup>

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## Abstract

Agricultural recreation is an important industry in Yilan and Hualien. The Yilan and Hualien area not only have rural landscapes that can relieve stress, but also has a variety of interesting experience activities, which has the potential to develop agricultural therapy. This study evaluates the effects of rocky leaf prints, a therapeutic experience activity, on human health and psychology. The physiological responses were evaluated five physiological indexes, blood pressure, blood oxygen, heart rate variability, sympathetic and parasympathetic activity, and salivary amylase. The psychological responses were evaluated by two kinds of questionnaires including benefits of horticultural healing and profile of mood states (POMS). The results showed that the rocky leaf prints activity has a positive impact on the subject's psychology. In physiological views, rocky leaf prints activity had benefits of physical wellness, like relaxation, and sympathetic nerve activity showed significantly decrease after the activity. Furthermore, psychological evaluation results showed that rocky leaf prints, a leisure agricultural experience activity, improved cognition and self- fulfill, and reduced negative emotions such as confusion, anger and fatigue. This study shows that rocky leaf prints, a leisure agricultural experience activity, has significant benefits such as physical stress relief and psychological improvement of negative emotions.

Keywords: profile of mood states, benefits of horticultural healing, heart rate variability

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