

**Propagation and Growing Native Plant Species *Erythralum scandens* BL
(*Bo Khai*) and *Phyllanthus elegans* L (*Rau ngot rung*) for Food
and Income Generation by Hill Tribes in the Northern
Mountainous Regions of Vietnam**

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Erythralum scandens BL (local name is *Bo Khai*) and *Phyllanthus elegans* L (local name is *Rau ngot rung*) are native plant species in the northern mountainous region of Vietnam, which have been widely used by local people as vegetable and medicinal herb. There are however still very few researches and little information about these plants. This study consisted of two components to address three main objectives: 1) to examine the effect of applying auxin substances to enhance the rapid propagation of *Erythralum scandens* BL; 2) to study the effect of light regimes on the growth of young seedlings when grown in the garden; and 3) to apply a farmer approach to understanding the natural growth and distribution, and the value and scarcity of the two native plant species.

The study found that the application of naphthalene acetic acid (NAA), indol butyric acid (IBA) and ABT promoted root formation and bud growth in the young plants of *Erythralum scandens* BL. The number of cuttings having roots significantly increased, and the propagation period decreased. Meanwhile, young *Erythralum scandens* BL plants grew best 50% shade, with more new buds and faster growth. The socioeconomic component of the study found that the two native plant species can be found mostly in limestone and hill land ecosystems. Young plants of *Erythralum scandens* BL grow well in shade light under thick forest, while *Phyllanthus elegans* L seedlings can grow in thin forest areas. There is high market demand as vegetables for these plants. However, they have been over-harvested from the wilds, increasing their scarcity in the region. Farmers have collected seedlings and seeds from the forests to grow in their gardens as new crops; unfortunately, they have been without much success due to lack of knowledge and technology.

Keywords: wild plants, propagation method, sunlight regimes, indigenous knowledge