Conservation status of *Andrographis paniculata* (Burm.F.) Wall Ex Nees and *Phyllanthus amarus* (Schumach. and Thonn) in selected districts of Tamil Nadu

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Abstract

Conservation status of *Andrographis paniculata* (Burm.F.) Wall Ex Nees and *Phyllanthus amarus* (Schumach. and Thonn), the two commercially important medicinal plants was investigated in selected districts of Taminnadu using herbal mapping and survey as tools. The conservation efforts taken at grass root level by the Women SHG and Traditional Medical Practitioners were also investigated. The results revealed that *Phyllanthus amarus* is found in all the 21 districts but its commonness is getting reduced. On contrast, *Andrographis paniculata* is not found in all the places. Out of the 100 Traditional Medical Practitioners (TMP) interviewed, 67% have reported the non availability of this herb in their area. The results of herbal mapping indicated that *Andrographis paniculata* is absent in 42 pockets among 50 pockets of study area. Participation of women SHG in ex situ conservation of medicinal plants is noteworthy. Out of the 940 women studied 834 involved in medicinal plants conservation in their home herbal garden. Women Self Help Group are interested in conserving *Andrographis paniculata* whereas they rely on natural habitat for *Phyllanthus amarus*. Traditional Medical Practitioners follow a unique and ethical code of conservation methods which is not commonly known by others.

Key words: *Andrographis paniculata*, Herbal mapping, *Phyllanthus amarus*, Conservation

Introduction

Medicinal plants benefit everyone on the earth in one or other way; it may be for drugs, cosmetics or for cultural and religious reasons. According to the world health organization 80% of people from developing countries rely mainly on traditional medicine for primary health care (Jackiesiles, 1999). *Andrographis paniculata* is a bitter annual crop contain the highest amount of andrographolide (2.39%) in their leaves (Sharma et al. 1992). This plant is also called as the great king of bitter (Raj and Sing, 2000). This plant is widely distributed throughout the plains of India from Uttarprdesh to Tamilnadu. Though it grows well in tropical and subtropical region, cooler climate with well distributed rainfall is most ideal (Faroosti et al. 1999). The therapeutic value of this plant is due to its enzyme induction mechanism. The whole plant has anti-inflammatory, immunosuppressive, and alexipharmic properties (Gupta et al. 1990).

Likewise *Phyllanthus amarus* is a small herb, usually under 30 cm tall is associated with rural health care for more than three thousand years and this herb is predominantly used to cure a wide spectrum of disease in traditional medicine in countries like India and China (Leslie Taylor, 2003). It has a wide number of other traditional uses like employing the whole plant for jaundice, frequent menstruation, diabetes, sores, swelling and itching (Nadkarmi, 1993). The main constituents in *Phyllanthus amarus* include lignans (Phyllanthine and hypophyllantline), alkaloids, bioflavonoids (quercetin) and repandusinic acid (Yeh, 2003). Both *Andrographis paniculata* and *Phyllanthus amarus* have commercial pressure in India and overseas countries for pharmaceutical purposes. Since there is no systematic and scientific cultivation practices are available, these plants are being collected from the natural habitats.