ANNALS OF PHARMACY AND PHARMACEUTICAL SCIENCES
Volume 1 Issue 2 (October, 2010) Page : 92-97

● RESEARCH ARTICLE ●

Accepted : September, 2010

A quantitative study of ethnobotanical knowledge distribution of North-east India

RANJANA GOGOI AND MANJIT GOGOI

ABSTRACT

This paper proposes an appropriate regression model as a mechanism for the maintenance of traditional ecological knowledge (TEK) of individuals associated with indigenous plants of North East India, which are handed down through the generations of ethnic people by cultural transmission and practices. On the basis of cross-sectional survey conducted in five reserve forest areas of Charaideo subdivision of Sivasagar district, the ethnophytotherapy knowledge distribution and the TEK distribution of ethnic groups are analyzed by using linear regression.

Key words : TEK, Ethnophytotherapy, Linear regression

INTRODUCTION

Methodological contributions are essential in any branch of science and many researchers have shown concern in contemporary ethnobiology (Steep, 2005). In the past, most ethnobotanical studies have recorded vernacular names and uses of plant species with little emphasis on quantitative studies. Then research in ethnobiology was primarily descriptive. In order to enhance the indicative value of ethnobotanical studies, there have been attempts in recent years to improve the traditional compilation-style approach through incorporating suitable quantitative methods of research in ethnobotanical data collection, processing and interpretation. Such quantitative approaches aim to describe the variables quantitatively and analyze the observed patterns in the study, besides testing hypotheses statistically. The concept of quantitative ethnobotany is relatively new and the term itself was coined only in 1987 by Prance and coworkers (Prance, 1991).

Accumulated knowledge about nature, termed traditional ecological knowledge (TEK) is an important part of people's capacity to manage and conserve both wild and agricultural systems over extended periods. It is acquired through frequent interaction with the local environment driven by a need to pursue daily subsistence strategies for food and economic provision. This knowledge is transferred between generations through observations and narratives as a key survival tool. It differs from modem knowledge by being dynamic, adaptive, and locally derived, thus coevolving with the ecosystem upon which it is based (Berkes *et al.,* 2000).

Wild plant resources are severely threatened by habitat loss and species-selective overexploitation. In addition, indigenous knowledge about the uses of wild plant resources is rapidly disappearing from traditional communities. In the context of conservation, sustainable and equitable use of wild plant resources, quantitative ethnobotany can contribute to the scientific base for management decisions. Indigenous knowledge and biodiversity are complementary phenomena essential to human development. But a very little of this knowledge has been recorded, yet it represents an immensely valuable database that provides humankind with insights on how numerous communities have interacted with their changing environment including its floral and faunal resources.

The aim of the present investigation is to study the maintenance of traditional ecological knowledge (TEK) of ethnic communities associated with indigenous plants of North East India, which are handed down through the generations by cultural transmission and practices. On the basis of cross-sectional survey conducted in five reserve forest areas of Charaideo subdivision of Sivasagar district, a quantitative analysis is done to build the 'ethnophytotherapy knowledge distribution' and the 'traditional ecological knowledge distribution' of ethnic tribes using regression analysis.

Ranjana Gogoi and Manjit Gogoi (2010). A quantitative study of ethnobotanical knowledge distribution of North-east India, *Ann. Pharm. & Pharm. Sci.,* **2** (10) : 92-97