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Ethno-medicinal diversity of the tropical legume *Tadehagi triquetrum* in Northeast Viet Nam

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Introduction

Since 3-4 decades, the mountainous North of Viet Nam has been experiencing dramatic environmental and social changes which subsequently created a severe threat to the biological and cultural diversity of the region. Despite the loss of diversity, little systematic research was conducted in order to conserve plant genetic diversity. Yet, physical loss of plants and rapid transformation processes consequently led to the loss of indigenous plant use knowledge associated with these plants.

Tadehagi triquetrum (L.) H. Ohashi was among 33 native legume species investigated in a comprehensive ethno-medicinal survey conducted among four ethnic groups, the Tay, Nung, Dao and Hmong in Bac Kan province, Northeast Viet Nam. *T. triquetrum* provides therapeutic virtues as medicinal plant as well as livestock feed under marginal conditions and thus represents an agronomically and economically interesting species. The objective of this study, carried out in 1999-2000, was to document the indigenous knowledge about *T. triquetrum* concerning its medicinal uses as a conservation strategy of cultural diversity.

Materials & Methods

A herbarium voucher containing *T. triquetrum* (Fig. 1) and other 32 wild legume species was presented to a range of village informants (327 households) in Bac Kan province. Samples of the herbarium were previously collected, dried, pressed and laminated. Most interviews were group interviews with several family members interacting (Figs. 2 and 3).

Fig. 1: *T. triquetrum* herbarium voucher

Fig. 2: Assessment of medicinal knowledge in a Tay community

Fig. 3: Assessment of medicinal knowledge in a Dao community

Women and knowledgeable persons (e.g. herbalists, healers) were key informants. All interviews were semi-structured. An interpreter assisted during the whole survey period.

Results & Conclusions

Medicinal uses attributed to *T. triquetrum* ranged from treating urinary problems, stomach ache, and diarrhoea to applications as general restorative and tonic. Medicinal uses and numbers of informants are listed below (Table 1).

Table 1: Ethno-medicinal uses of *Tadehagi triquetrum* (L.) H. Ohashi

Medicinal applications	Mode of preparation	Mode of administration	Plant part used	Special patients	*No. of informants
appetiser and general restorative	decoction	oral	roots	children and old people	66
urinary problems	infusion	oral	roots		74
stomach ache	infusion	oral	roots		17
diarrhoea	infusion	oral	roots		15
liver complaints	infusion	oral	roots		2
uterus pain	infusion	oral	roots		1
flatulence	infusion	oral	roots	infants	1
constipation	infusion	oral	roots	children	2
fever	infusion	oral	roots		1
headache	infusion	oral	roots		1
common cold	infusion	oral	roots	children	2
heart fortifier	decoction	oral	whole plant		2
blood fortifier	decoction	oral	whole plant		1
liver disease	decoction	oral	whole plant		6
cough and sore throat	decoction	oral	whole plant		2
tonic	decoction	oral	whole plant		29
mild sedative	decoction	oral	leaves		7
bleeding wounds	poultice	topical	roots and leaves		7
fractured bones	poultice	topical	roots and leaves		5
mitigation of numbness and immobility	hot compress	topical	roots and leaves		1
stomatitis	chewed	oral	leaves		1
pain	decoction	bath or hot compress	whole plant		1
diarrhoea	decoction	oral	leaves mixed with rice	pigs	1

*As it was not distinguished between group and single informant interviews the unit of a household was considered to be equal to one informant.

Plant use knowledge was a common though varying pool among families or villages. Following community communication channels plant use knowledge is orally transmitted. However, ethnic groups in Northeast Viet Nam undergo a rapid transformation process from traditional rural to a more modern, market oriented lifestyle disrupting the traditional channels of oral communication causing the loss of ethnic authenticity and indigenous knowledge as a side effect. Thus recording the diversity of plant use knowledge of ethnic groups represents a means to prevent loss of knowledge as an essential part of cultural diversity.

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