

Studies on wild edible plants of ethnic people in east Sikkim

Savita*, Lokendra Singh, Preeti Vats and Saima Parveen

Department of Botany, Meerut College, Meerut - 250 110 (U.P.) India

(Accepted : June, 2006)

East Sikkim has a hilly terrain, verdant landscape, rich plant diversity and Lepchas, Bhutias, Tibetans as ethnic inhabitants who are backward with a quest for easily available and cheap foodstuffs. Hence, the present communication reports on 222 angiospermic plants which are edible to man and his cattle.

Key words : Wild plant, Edible plant.

INTRODUCTION

DESPITE the fact that India is a megacentre of biodiversity, only sporadic and unrelated studies have been made on the ethnobotanical plants of East Sikkim (Janmeda, 2004). In an earlier paper Singh, Vats, Garg and Ranjana (2004) described "Medicinal, Incentive and Edible Gymnosperms, Pteridophytes and Mushrooms of East Sikkim" and Janmeda, Singh and Vats (2006) reported on the "Folk claims on Monocotyledonous plants in East-Sikkim", necessitating communication on wild edible angiospermic plants of ethnic people of East Sikkim which is timely and appropriate.

MATERIALS AND METHODS

East Sikkim has a difficult hilly terrain having varied elevation ranging from 300 meters near Rangpo to more than 4,392 meter near Nathu-La region. The district has an area of 954 sq km and lies between 27°5' to 28°N latitude and 88°33' to 88°56' E longitude. The forest area of the district is 47,364 hectare and the climate is moist tropical, temperate and sub-alpine (Singh *et al.*, 2004). The study involved fieldwork and direct interviews as well as questionnaire. Data were obtained from villagers, ethnic Lepchas (L), Nepalese (N), Bhutias (Bh), Monks and Village Doctors apart from folk songs and tales.

RESULTS AND DISCUSSION

As a result of extensive, intensive and frequent field trips in the forest area occupied by ethnic people and inquiries from them, local herbal Doctor, folk tales and songs, following enumeration of edible angiosperms were made and their ethnobotanical uses have been reported (Table 1).

The plants reported in this study are an integral component of the ecosystem of East Sikkim. In all, 222 angiospermic plants edible to ethnic inhabitants of the area and to their cattle-Yak, Goats, Cows, Sheep, Horse, have been described. Of them, most are edible directly or as bread, pickles, chutneys, local beverages and condiments. Few, on the other hand are useful as source of edible oil, butter or resin (see Table). Still others are fodder plants, viz., *Albizia odoratissima*, *Alstonia scholaris*, *Amaranthus caudatus*, *Amplocissus barbata*, *Antiderma diandrum*, *Artocarpus lakoocha*, *Azanza lampas*, *Bauhinia vahlii* and *B. variegata*, *Beaumontia grandiflora*, *Boehmeria platyphylla*, *Bridelia retuse*, *Bryonopsis laciniosa*, *Butea parviflora*, *Caruga*

pinnata, *Cironniera reticulata*, *Cissus adnata*, *C. repanda*, *C. repens*, *Cyathula prostata*, *Diploknema butyracea*, *Drypetes lancifolia*, *Elaeagnus conferta*, *Elaeocarpus lanceaefolius*, *Elatostema platyphyllum*, *Entada scandens*, *Eupatorium cannabinium*, *Evodia spp.*, *Ficus oriculata*, *Ficus cunia*, *Ficus hitra*, *Ficus infectoria*, *Fraxinus floribunda*, *Garuga pinnata*, *Gmelina arborea*, *Hedyotis scandens*, *Holarrhena antidysenterica*, *Houttuynia cordata*, *Hymenodictyon excelsum*, *Jasminum dispersum*, *Leea robusta*, *Leucosceptrum sanum*, *Litsea cubeba*, *Litsea glutinosa*, *lophophyllum bicrista*, *Mallotus philippensis*, *Morinda citrifolia*, *Mucuna monosperma*, *Murraenda frondosa*, *Naravellia zeylanica*, *Osbeckia arinita*, *Ostodes paniculata*, *Paederia foetida*, *Parthenocissus himalayana*, *Piper aurantiacum*, *Polygonum chinense*, *Polygonum hydropiper*, *Rubia cordifolia*, *Salix tetra*, *Saurauja napaulensis*, *Schima wallichii*, *Sechium edule*, *Selinum candollei*, *stephania glabra*, *stereospermum tetragonium*, *Tetrameles nudiflora*, *Trachelospermum lucidum*, *Trevesia palmata*, *Turpinia pomifera*, *Urtica dioica*, *Urtica parviflora*, *Vitex quinata* and *Wallichia densiflora*. Plants of Beverages category are *Alnus nepalensis*, *Amoose spectabilis*, *Angelica archangelica* (Tea), *Artemesia parviflora*, *Betula cylindrica stachys*, *Bidens pilosa*, *Camellia sinensis*, *Castanopsis hystrix*, *Cinnamomum tamala*, *Dioscorea deltoidea*, *Eurya raponica*, *Gycine max* - used for fermented Kinema, *Helixanthera ligustrina* - used as substitute of tea, *Hippophae salicifolia* - used as substitute for tea, *Litsea cubeba* - local beverages and wines, *Mahonia acanthifolia* - distilled to make alcohol, *Plumbago zeylanica* - roots are used for local drink, *Padophyllum hexandrum* (Chang), *Polygala arillata* - roots used in fermented beer, *Quercus lineata* - latex used as tea or coffee, *Rubus rosaefolius* (local beverages), *Saxifraga ligulata* (tea substitute) *Scoparia dulcis* (local drink as well as fodder). As to the Miscellaneous plants *Cinnamomum tamala*, *Piper longum*, *Heracleum tanatum* are Spice plants, *Manihot esculenta* is bread plant, *Perilla ocimoides* is oil plant and *Diploknema butyracea* is butter plant. The last plant Chiuri, is *Aesandra butyracea* Roxb. Baehni is synonym of *Diploknema butyracea* (Singh & Khan, 2004). Earlier it was called *Brassia sp.* This plant is used as ointment, bee forage, gur and fuel wood also. (Negi *et al*, 1988). Our studies are supportive to the findings of Janmeda (2004) and shed new light to the edibles of East Sikkim.

S.No.	Plant species	Local name(s)	Used as
1.	<i>Abroma augusta</i> Linn. (Sterculiaceae)	Sanukapari (N), Sweet chuil (L)	Seeds directly edible
2.	<i>Abutilon indicum</i> G. Don (Linn) (Malvaceae)	Kanghi (N)	Leaves are cooked, Flowers directly edible
3.	<i>Actinidia strigosa</i> H.K.F. & T. (Actinidiaceae)	Tekiphal Lahara (N), Tuksing-rik (L)	Fruits directly edible

* Author for Correspondence