

Wild edible fruits of Wokha district of Nagaland, India

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Wokha district is one of the most interesting floristic region in the state of Nagaland. Recent survey recorded two gymnospermous and 54 angiospermous plants fruits and/or seeds of which are used as food and/or food supplements by the local people.

Key words: Wild edible fruits, Wokha district, Nagaland

INTRODUCTION

Wokha, the land of *Lotha Naga* tribe is one of the 11 districts in the state of Nagaland, India. The district lies between 22°20½–26°15½ North latitude and 94°02½–95°01½ East longitude with a total geographical area of 1628 sq km. The North and West sides are bordered by Assam, on the East by Mokokchung and Zunheboto and on the South by Kohima, with the total population of 1,61,098 (as per 2001 census). The altitude varies from 304.30 m (Baghty) to 1313.69 m (Wokha town). The climate is warm in the lower and in the foot hills areas and cool over higher hills. The rainfall is varied with an annual average of 200 – 980 cm.

The *Lotha Naga* tribe prefers to live mostly on hill-tops and on slopes of mountainous area forming small and isolated villages surrounded by dense forests. Most of the villages are formed in isolated and remote places and are hardly connected to the nearby towns and developed areas. In such situation, the people mostly depend on natural resources from the forests for their livelihood such as food, medicine, shelter, cloths etc. They use fruits of numerous plant species as their food and nutritional supplements. The district is perhaps one of the most interesting floristic regions in the state. The richness and diversity of flora is mainly due to wide range of variation in rainfall, temperature and altitudes in the region. Thus, the Wokha district offers an excellent scope and potential to studies in various aspects of research works including the wild edible fruits particularly for the welfare of the local people in the area.

In fact, a good number of research works have been contributed in the last one or two decades within and outside the country, including wild edible fruits (Anonymous 1948-'72; Chengh 1965; Singh 1978). However, so far nothing has been done from the district except a few papers from the state (Jamir 1990, 1996; Jamir & Rao 1990; Jamir & Upadhyay 1998). During the present study, an attempt has been made to investigate and survey the wild edible fruits those are found in the area and are reported in this communication.

MATERIALS AND METHODS

During the present investigation, frequent field trips were made throughout the year at regular interval in villages located in different corners of Wokha district. During the field trips, the wild fruits were collected from the forests and the information regarding the edible fruits has been gathered through the interaction with local people, village elders etc. The survey and collection was made for five years (i.e. 2003 to 2007). Voucher specimens were processed and identified using conventional methods (Jain & Rao 1977). The collected information regarding the edible fruits are compiled and presented in tabular form. The names (botanical names) are arranged alphabetically followed by family, exsiccatae, local names (Lotha) and edible parts (Table 1).

RESULTS AND DISCUSSION

During the survey and collection, a total of 56 species of wild edible fruits have been recognized (Table 1). However, availability of most of these wild edible fruits are now depleting rapidly owing to various factors such as 'Jhum' or 'Shifting cultivation', forest fire, felling for timber, construction of roads and other socio-economic anthropogenic activities in the area. Therefore, it is the need of the hour to conserve and protect this valuable wealth of forests including the wild edible fruit plants in the area. It is quite pertinent that at least some of these wild edible fruits might be rich in nutritive value for better health and also for new food. Moreover, this would uplift the economic condition of the local people particularly to those who are living in the rural area if properly tap and utilize these wild edible fruits of the areas in a scientifically designed program.

Table 1. List of wild edible fruits in Wokha district of Nagaland

Name of species	Family	Exsiccata	Local name	Edible parts
<i>Amomum dealbatum</i> Roxburgh	Zingiberaceae	Taka 299	Melangthi	Ripe seeds
<i>Ardisia crispa</i> (Thunberg) DC.	Myrsinaceae	Taka 205	NR	Fruits
<i>Artocarpus chaplasha</i> Roxburgh	Moraceae	Taka 306	Zeveithi	Pulp & seeds
<i>Artocarpus lakoocha</i> Roxburgh	Moraceae	Taka 265	Etothi	Fruits
<i>Baccaurea ramiflora</i> Loureiro	Euphorbiaceae	Taka 201	Atum Athi/ Odemethi	Ripe fruits
<i>Calamus leptospadix</i> Griffith	Arecaceae	Taka 211	Oro tesua	Fruits
<i>Calamus erectus</i> Roxburgh	Arecaceae	Taka 270	Oro tsuphoa	Fruits, sour
<i>Caryota urens</i> L.	Arecaceae	Taka 300	Ngangdong/ Ethantsung	Roasted nuts
<i>Castanopsis indica</i> (Roxburgh) A.DC.	Fagaceae	Taka 231	Thyysolothi	Nuts eaten raw
<i>Cayratia pedata</i> (Loureiro) Gagnepien	Vitaceae	Taka 310	Tsungtsungrothi	Fruits (berry)
<i>Cordia dichotoma</i> Forster f.	Boraginaceae	Taka 202	NR	Ripe fruits
<i>Dillenia indica</i> L.	Dilleniaceae	Taka 350	Zuvothi	Fleshy persistent calyx
<i>Diospyros kaki</i> Thunberg	Ebenaceae	Taka 298	NR	Ripe fruits
<i>Docynia indica</i> (Wallich) Decaisne	Rosaceae	Taka 560	NR	Fruits
<i>Elaeagnus conferta</i> Roxburgh	Elaeagnaceae	Taka 257	NR	Fruits
<i>Elaeocarpus floribundus</i> Blume	Elaeocarpaceae	Taka 341	NR	Fruits & seeds
<i>Elaeocarpus tectorius</i> (Loreiro) Poiret	Elaeocarpaceae	Taka 380	Likhothi	Fruits & seeds
<i>Emblica officinalis</i> Gaertner	Euphorbiaceae	Taka 237	Jekhethi	Raw & pickled fruits
<i>Entada rheedii</i> Sprengel	Mimosaceae	Taka 224	Khorok	Seeds
<i>Ficus auriculata</i> Loureiro	Moraceae	Taka 312	Zuvothi	Fruits
<i>Ficus elastica</i> Roxburgh	Moraceae	Taka 716	Nitsudong	Ripe fruits
<i>Ficus fulva</i> Rainwardt	Moraceae	Taka 52	Popouthi	Fruits
<i>Ficus glomerata</i> Roxburgh	Moraceae	Taka 615	Yiurthi	Young fruits

Name of species	Family	Exsiccata	Local name	Edible parts
<i>Ficus hirta</i> Vahl	Moraceae	Taka 18	Tokhudong	Ripe fruits
<i>Ficus hispida</i> L.f.	Moraceae	Taka 278	Nithudong	Fruits
<i>Ficus religiosa</i> L.	Moraceae	Taka 209	Koruyu	Ripe fruits
<i>Ficus semicordata</i> Buch.-Ham. ex Smith	Moraceae	Taka 254	Khyingothi	Fruits
<i>Firmiana colorata</i> (Roxburgh) R. Brown	Sterculiaceae	Taka 277	Metangtong	Raw/ roasted fruits
<i>Garcinia acuminata</i> Planchon & Triana	Clusiaceae	Taka 225	Cerethi	Fruit
<i>Garcinia cowa</i> Roxburgh ex DC.	Clusiaceae	Taka 301	NR	Fruits
<i>Garcinia pendunculata</i> G. Don	Clusiaceae	Taka 343	Mijen	Fruits, raw or cooked
<i>Gnetum gnemon</i> L.	Gnetaceae	Taka 275	Mhalive/ Halamou tsung	Roasted seeds
<i>Gnetum montanum</i> Markgraf	Gnetaceae	Taka 204	Mhalivo tesua	Cooked/roasted seeds
<i>Hodgsonia macrocarpa</i> (Blume) Cogniaux	Cucurbitaceae	Taka 291	Dhopothi	Seeds
<i>Juglans regia</i> L.	Juglandaceae	Taka 266	Nothi	Seeds
<i>Livistona jenkinsiana</i> Griffith	Arecaceae	Taka 226	Khumotong/ Kho mothi	Young nuts
<i>Malus baccata</i> (L.) Borkhausen	Rosaceae	Taka 267	Malanthi	Dried fruit
<i>Mangifera andamanica</i> King	Anacardiaceae	Taka 264	Tssipyongthi	Mature & ripe fruits
<i>Mangifera sylvatica</i> Roxburgh	Anacardiaceae	Taka 284	Malanthi	Ripe fruit
<i>Melastoma malabathricum</i> L.	Melastomataceae	Taka 235	Chuthuksuru	Fruits
<i>Melia azedarach</i> L.	Meliaceae	Taka 258	Etsson	Mature & ripe fruits
<i>Myrica esculenta</i> Buch.-Ham. ex. D. Don	Myricaceae	Taka 762	NR	Fruits
<i>Nelumbo nucifera</i> Gaertner	Nymphaeaceae	Taka 207	Lotus otsung	fruits & rhizomatous stem
<i>Nephelium longana</i> Cambessedes	Sapindaceae	Taka 259	NR	Ripe fruits
<i>Osbeckia nepalensis</i> Hooker f.	Melastomataceae	Taka 294	NR	Seeds
<i>Prunus nepalensis</i> Steudel	Rosaceae	Taka 761	Shulongthi	Fruits
<i>Rhus semialata</i> Murr	Anacardiaceae	Taka 213	Thumpak	Fruits
<i>Rubus ellipticus</i> J.E. Smith	Rosaceae	Taka 295	Vekhvuthi	Fruits
<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Taka 205	Ora tssupyongthi /Enungthi	Ripe fruits
<i>Sterculia urens</i> Roxburgh	Sterculiaceae	Taka 208	NR	Roasted/ cooked seeds
<i>Stixis suaveolens</i> (Roxburgh) Pierre	Capparaceae	Taka 274	Hamvuthi	Ripe fruits

Name of species	Family	Exsiccata	Local name	Edible parts
<i>Syzygium cumini</i> (L.) Skeels	Myrtaceae	Taka 290	Shilothong	Fruits
<i>Terminalia bellirica</i> (Gaetner) Roxburgh ex Fleming	Combretaceae	Taka 760	Jakrhonthi	Mature fruits
<i>Terminalia chebula</i> Retzius	Combretaceae	Taka 325	Yonkothi	Mature & ripe fruits
<i>Zalacca secunda</i> Griffith	Arecaceae	Taka 261	Kothi	Young fruits

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