RESEARCH NOTE

ETHNOBOTANICAL STUDIES IN CENTRAL NEPAL: THE CEREMONIAL PLANT-FOODS

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Introduction
Plants have always been an inevitable part of the life and culture of the Nepalese people. Hence, it is but natural that all aspects of the Nepalese folk-life and beliefs have sufficient narration about plants and their parts. The ceremonial plant-foods of the Nepalese people are an example of their strong commitment to conserve this rich tradition. The present paper is an attempt to record the common religious and traditional ceremonies that are also meant for the consumption of particular plant-foods in central Nepal.

Methods of Study
The study area, which included 15 districts (Kathmandu, Lalitpur, Bhaktapur, Kabhrepalanchok, Sindhupalchok, Rasuwa, Nuwakot, Dhading, Bara, Parsa, Rautahat Makawanpur, Chitwan, Ramechhap and Dolkha) of central Nepal (Map 1), was surveyed.

Map 1: Location of study area in the country.
repeatedly between 1984-1988. Interviews were conducted to the villagers with different ethnic backgrounds, including the aged persons of the urban localities. Information on religious and other traditional occasions along with the corresponding plant-foods consumed, was documented. The recorded data were confirmed through repeated sources in different parts of the study area. Plants or plant-products used as essential food-stuffs in various occasions were collected at the study sites. They were identified in the National Herbarium (KATH) and plant Laboratories, Department of Forestry and Plant Research, Godawari, Lalitpur, Nepal. All ethnobotanical records were as reported by the informants.

Findings

In the following discussion, 22 religious occasions have been dealt with in a sequential manner along with the corresponding plant-foods consumed. Among the 57 species, sub-species and varieties of plants under 47 genera and 25 families that furnished the ceremonial foods, Papilionaceae occupies the highest number succeeded by Cucurbitaceae and Poaceae, respectively. For each plant, its Latin name, family and Nepali name(s) have been given in succession. However, the family and Nepali names have not been repeated.

1. **Baisakh sankranti** (1st day of the solar month of Baisakh/April): The tender leaves of neem tree (Azadirachta indica A. Juss.; Meliaceae; “Neem”) are eaten. The dried slices of radish (Raphanus sativus L.; Cruciferae; “Mula”), green seeds of field pea (Pisum sativum L. var. arvense (L.) Poir.; Papilionaceae; “Sano kerau”) and broken grains of rice (Oryza sativa L.; Poaceae; “Kanika”) are cooked together and eaten.

2. **Judsital** (2nd day of the solar month of Baisakh/April): Various types of sweets prepared from wheat (Triticum aestivum L.; Poaceae; “Gahun”) or rice-flour (Oryza sativa L.), are eaten followed by the sprinkling of holy water by the elder persons on the head of their junior members or relatives. It is mostly celebrated in the plains.

3. **Achhaya tritiiya** (3rd day of the bright half of the lunar month of Baisakh/April-May): The grains of barley (Hordeum vulgare L.; Poaceae; “Jau”) are grounded into flour and fried, called “satu” or ‘sattu’. It is eaten along with the squash (“sarbat”) prepared by mixing sugar or molasses and powdered black pepper (Piper nigrum L.; Piperaceae; “Marich”) in water. The merit of these food-stuffs lies mainly in feeding the other persons.

4. **Dashahara, Ganga dashahara** (10th day of the bright half of the lunar month of Jestha/June): The newly harvested summer vegetables are cooked together. The
items to be mixed are at least 10 in number. Common examples of the vegetables used on the occasion are the pods of sword bean (Canavalia gladiata (Jacq.) DC.; Papilionaceae; “Ghiu simi”), Hyacinth bean (Lablab purpureus (L.) Sweet; Papilionaceae; “Asare simi”) and cowpea (Vigna unguiculata (L.) Walp.; Papilionaceae; “Bodi”), fruits of lady’s fingers (Abelmoschus esculentus (L.) Moench; “Ramtoriyan”), sweet pepper (Capsicum frutescens L.; Solanaceae; “Bhende khursani”), long pepper (Capsicum frutescens L. var. longum Bailey; Solanaceae; “Dhokre khurasani”) cucumber (Cucumis sativus L.; Cucurbitaceae; “Kankro”), bottle gourd (Lagenaria siceraria (Molina) Standley; Cucurbitaceae; “Lauka”), ribbed gourd (Luffa acutangula (L.) Roxb.; Cucurbitaceae; “Pate ghiramula”), vegetable sponge (Luffa aegyptiaca Mill.; Cucurbitaceae; “Ghiraamula”), bitter gourd (Momordica charantia L.; Cucurbitaceae; “Tite karela”) momordica (Momordica cochinchenensis Spreng.; Cucurbitaceae; “Chatter”), brinjal (Solanum melongena L.; Solanaceae; “Bhanta”), and snake gourd (Trichosanthes anguina L.; Cucurbitaceae; “Chichindo”), fruits and tender shoots of pumpkin (Cucurbita pepo L.; Cucurbitaceae; “Farsi”), and the tender leaves of taro (Colocasia esculenta (L.) Schott; Araceae; “Karkalo”). Probably to make up the essential number of items, and most probably in order to give the dish an agreeable sour taste, unripe fruits of plum (Prunus domestica L. subsp. institia (L.) Schneid.; Rosaceae; “Arubokhada”) are added in the hills while the same in the plains is replaced by the unripe fruits of mango (Mangifera indica L.; Anacardiaceae; “Aamp”). However, in Kathmandu Valley and certain other localities, the practice of adding both the above mentioned fruits was noticed.

5. *Sithi nakha* (6th day of the bright half of the lunar month of Jestha/June): The seeds of black gram (Vigna mungo (L.) Hepper; Papilionaceae; “Mas”), greengram (Vigna radiata (L.) Wilczek; Papilionaceae; “Mung”) and garden pea (Pisum sativum L.; Papilionaceae; “Thulo keru”) are made into a paste separately. These are fried in cooking oil or butter in a pan to prepare the traditional fritter-cakes (“barg”). These cakes are accompanied by the fried bittten-rice (Oryza sativa L.; “syabaji”) and “sanyebaji”, which is the collective name for “syabaji”, bittten-rice, fried soybean (Glycine max (L.) Merr.; Papilionaceae; “Bhatmas”), pieces of ginger (Zingiber officinale Rosc.; Zingiberaceae; “Aduwa”), tender leaves and cloves of garlic (Allium sativum L.; Alliaceae; “Lasun”) and boiled seeds of cowpea (Vigna unguiculata (L.) Walp.), dressed with salt, chillies (Capsicum annum L.; Solanaceae; “Khursani”), turmeric powder (Curcuma domestica Val.; Zingiberaceae; “Besar”) and Indian rape oil (Brassica napus L. var. napus L.; Cruciferae; “Tori”). All these items are offered to the family God (“kuldevata”), and eaten. This ceremony is the characteristic feature of the Newars of Kathmandu Valley, although it has been frequently observed among those of other adjoining localities, too.

7. *Harisayani ekadashi* (11th day of the bright half of the lunar month of Asar/July): The boiled tubers of taro (Colocasia esculenta (L.) Schott.; “Pindalu”) and sweet potato (Ipomoea batatas (L.) Lamk.; Convolvulaceae; “Sakarkhanda”) are eaten.

8. *Rishi tarpani, Rakshya bandhan, Janai purniya* (Full-moon day of the lunar month of Shravan/July-August): Different types of dry beans are soaked in water, 3 or more days before, to allow sufficient rooting. At least 9 types of these are cooked together, called “quanti”, and consumed. The commonly used beans are the sword bean (Canavalia gladiata (Jacq.) DC.), gram (Cicer aritinum L.; Papilionaceae; “Chana”), soybean (Glycine max (L.) Merr.), hyacinth bean (Lablab purpureus (L.) Sweet), garden pea (Pisum sativum L.), field pea (Pisum sativum L. var. arvense (L.) Poir.), broad bean (Vicia faba L.; Papilionaceae; “Bakula”), black gram (Vigna mungo (L.) Hepper), green gram (Vigna radiata (L.) Wilczek), rice bean (Vigna umbellata (Thunb.) Ohwi and Ohashi; Papilionaceae; “Mashyang”), and cowpea (Vigna unguiculata (L.) Walp.). Based upon the tradition and taste, in some localities, fenugreek seeds (Trigonella foenum-graecum L.; Papilionaceae; “Methi”) may also constitute one of the components.

9. *Bhadra mahina* (The solar month of Bhadra/August-September): The tubers of elephant-foot yam (Amorphophallus campanulatus (Roxb.) Blume ex Dcne.; Araceae; “Ole”) is consumed in the plains in various ways (such as boiled, roasted, fried, pickled or cooked like vegetable). Its consumption in this period is believed to please the god and various types of chronic diseases, more particularly the bleeding-piles, are supposed to be cured.

10. *Chatha, Chatha deya puja* (4th day of the bright half of the lunar month of Bhadra/August-September): The Newars worship the god Ganesh which is followed by that of the moon. The fried kernels of peach (Prunus persica (L.) Batsch; Rosaceae; “Aru”, “Baspoti”), pieces of sugarcane (Saccharum officinarum L.; Poaceae; “Ukhu”) and ginger (Zingiber officinale Rosc.) are the inevitable food items to be offered to the God. Fruits of the season like guava (Psidium guajava L.; Myrtaceae; “Amba”), cucumber (Cucumis sativus L.), pear (Pyrus communis L.; Rosaceae; “Naspati”) and banana (Musa paradisiaca L.; Musaceae; “Kera”), etc. are also considered essential by the majority. Other food items that are offered to the god and eaten are the fried seeds of wheat (Triticum aestivum L.), maize (Zea mays L.; Poaceae; “Makai”), soybean (Glycine max (L.) Merr.),
cowpea (Vigna unguiculata (L.) Walp.), hyacinth bean (Lablab purpureus (L.) Sweet), broad bean (Vicia faba L.), garden pea (Pisum sativum L.), field pea (Pisum sativum L. var. arvense (L.) Poir.), and gram (Cicer arietinum L.).

11. Rishi panchami, Teej panchami (5th day of the bright half of the lunar month of Bhadra/August-September): The women eat cooked-rice with the vegetable prepared from the tender leaves of taro (Colocasia esculenta (L.) Schott).

12. Kojagrat purhima (Full-moon day of the lunar month of Aswin/October): The seeds of gorgan nut (Euryale ferox Salisb.; Euryalaceae; “Makhana”), betel leaves (Piper betel L.; Piperaceae; “Pan”) containing lime, catechu (wood-extract of Acacia catechu (L. f.) Willd.; Mimosaceae; “Khayar”) and betel-nut (Areca catechu L.; Palmae; “Supari”), and coconut-water (Cocos nucifera L.; Palmae; “Nariwal”), supposed to be the favorite foods of the goddess Lakshmi, are offered to the goddess and eaten. The seeds of gorgan nut (Euryale ferox Salisb.) are, however, mostly boiled in milk with sugar to prepare a sweet (“khir”), offered to the goddess and eaten.

13. Lakshmi puja, Dipawali (New moon day of the lunar month of Kartik/October): Different types of sweets and breads are eaten. More particularly, the round-bread (“sel”), prepared from the rice flour (Oryza sativa L.; “Chamal”), is consumed.

14. Bhai tika, Bhai puja, Bhatri puja (2nd day of the bright half of the lunar month of Kartik/October): The kernel of walnut (Juglans regia L.; Juglandaceae; “Okhar”), endosperm of Indian chestnut (Castanopsis indica (Roxb.) A. DC.; Fagaceae; “Katus”), and the fruit-bark of citron (Citrus medica L.; Rutaceae; “Bimiro”) are eaten, which are offered by the sisters to the brothers.

15. Haribodhini ekadashi, Thulo ekadashi (11th day of the bright half of the lunar month of Kartik/October-November): As in Harisayani ekadashi (July), the boiled tubers of taro (Colocasia esculenta (L.) Schott) and sweet potato (Ipomoea batatas (L.) Lamk.) are eaten.

16. Tulashi ko hom (Any one among the 12th to 15th day of the bright half of the lunar month of Kartik/October-November): The rice-grains (Oryza sativa L.), soaked in water, are mixed with curd and banana (Musa paradisiaca L.) and some powdered black pepper (Piper nigrum L.), popularly known as “dahi chamal”, is offered to the goddess “Tulasi” (The Holy Basil, Ocimum sanctum L.; Lamiaceae), and eaten.

17. Mangsir mahina (The solar month of Mangsir/November-December): The whole
month is valued for the consumption of cucumber (Cucumis sativus L.). This being an off-season for the same, preserved fruits or the pickles are eaten without mentioning its name ("kankro") verbally.

18. *Yamari punhi* (Full-moon day of the lunar month of Mangsir/December): A special sweet, called "yamari", is eaten. It is a ball-like structure, made of rice-flour (Oryza sativa L.) which contains boiled molasses inside.

19. *Push pandraha* (15th day of the solar month of Paush/December): Moist rice-grains (Oryza sativa L.) are fried, known as "khatte". It is mixed with butter and consumed.

20. *Maghe sankranti, Makar sankranti* (1st day of the solar month of Magh/January): Fried seeds of sesame (Sesamum indicum L.; Lamiaceae; "Til") are mixed with boiled molasses and made into balls, known as "Til ko laddu". It is eaten along with the boiled rhizome of white yam (Dioscorea alata L.; Dioscoreaceae; "Tarul"), butter and boiled and refined molasses ("chaku"). Rice (Oryza sativa L.) and black gram (Vigna mungo (L.) Hepper) are cooked together with salt to prepare "khichadi". It is eaten in the meal along with the vegetable prepared from the spinach leaves (Spinacia oleracea L.; Chenopodiaceae; "Palungo") and the rhizome of white yam (Dioscorea alata L.).

21. *Magh pandraha* (15th day of the solar month of Magh/January): Rice-flour (Oryza sativa L.) is mixed with water to make a flexible mass. It is fried in butter to prepare "pua" and consumed.

22. *Chaitra krishna pareba* (1st day of the dark half of the lunar month of Chaitra/March): The tender leaves and inflorescence of mango (Mangifera indica L.) are eaten.

**Discussion**

Although it is difficult to trace back exactly why and how the plant-foods became associated with the rites, it can be assumed safely that their association with the rituals initiated in the remote past following their usefulness in one or the other way, some of which are known even today. In general, the ceremonial plant-foods are directly influenced by the religion of the people. As the Hinduism and Buddhism dominate the present study area, the ceremonial plant-foods are governed by the Hindu or Buddhist mythology, rituals and classical epics. However, some regional or ethnic characteristics also seem to have influenced the ceremonial plant-foods in certain locality.

The dietary status of majority of the rural Nepalese populace represents inadequate nutrition, dominated by rice in the plains and flours in the hills. Koppert
(1986:216) studied the food and nutrition in central Nepal and observed that 62% of the total weight of the food-items consumed was shared by the cereals that contributed to almost 90% of the total calories. Food-stuffs consumed in various ceremonies included the legumes, green vegetables, roots, rhizomes and tubers, fruits and seeds, etc., holding the already established nutritional virtues. Ceremonial food-habit, therefore, appears to be a step towards nutrition, on religious grounds. However, most of these ceremonial foods are eaten as a mere custom in particular ceremonial days alone, irrespective of the optimum dose, their critical scientific evaluations in relation to the dosage and course on hygienic grounds is most desirable.

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References