

## RICE VARIETIES IN ANTIQUITY INDIA

B. D. Sharma

National Bureau of Plant Genetic Resources,  
Regional Station, Shimla 171 004 (Himachal Pradesh)

Indian subcontinent possesses rich diversity of agri horticultural crop plants because of its unique geographical features. There have been much less efforts in the field of archeology to reveal the prehistory of India as a whole and the north-east in particular. J.H. Hutten and J.P. Mills have made large collections of stone age tools from the Naga hill (Nagaland), North Cachar Hills (Karbi-Anglong district of Assam), and the Garo Hill (Meghalaya). Based on these and other exploratory works Shri K.L. Barua in his "Prehistoric Cultures in Assam" notes that there was sufficient evidence provided by the stone age tools found in various excavations to prove that this region was inhabited by neolithic or new stone age people who introduced shouldered celt, terraced rice cultivation, megalithic burials and matriarchy. There might have been influence of Hoabinhian culture in Garo Hills (Meghalaya) dating back to 10,000 B.C. or even earlier indicating a shift in subsistence pattern from food gathering and hunting food production. The Tripura excavations of Tilla site have been dated to upper Pleistocene Age of c.32,500 B.C.. Thus scholars all over the world strongly believe that archaeology of north-east India might reveal a lot of prehistory of human beings in India because this region is known to have played a great role in domestication of a number of food plants including rice. This is supported by Ian C. Glover (1985) who wrote, "India is the centre of greatest diversity of domesticated rice with over 20,000 (out of 50,000) indentified varieties and strains and N-E India is the most favourable single area of the origin of domesticated rice". This gives a clear indication of the earliest domestication of rice in India. Still more excavations may establish the fact on firm grounds. Another support to this is from the Sushrut Samhita which is said to have been compiled by the great surgeon Sushrut about 2600 B.C. (Ambika Dutt Shastri, 1953). In his monumental work, he has mentioned several rice varieties along with their medicinal uses. The Aryans used the term Brihi which over period of time changed to "Rihi" and then to "rice" towards the west of the continent. The belief gets further strengthened that the rice might have its origin and early domestication in India only.

In chapter 46 of Sushrut Samhita, Shri Dhanwantri described to his best of disciples Sushrut the Shali Varga (Rice Group) for the main food grain of that time. Here he furnishes the details of autumn ripening rice known as "Shali". He says that shali rice is sweet in taste, easy to digest, tonic, alleviating pitta, slightly aggravating vata and kapha, oily and results in reduced fecal matter. The main varieties described by him under this (shali rice) category are:

Lalshali, kalam, ardkam, Panduck, Sugandhak (Vasumati), Shakunahrit, Puspandak, Pundreek, Mahashali, Sheet Bheeruk, Radhrapusak, Deerghshook, Kanchnak, Mahish, Mahashook, Haynok, Dushak, Mahadushak etc.

He further describes that Lalshali (Red rice) is the best among all in medicinal properties. It has good effect on eyes, skin, body strength, boulds and "tridoshas" (vata, pitta, kapha); removes all poisonous substances from the body, and Provides relief from fever relieves fever. Early maturing (60-days varieties known as Sastik Sathi or Sathu) rice varieties ripening in summer months of May and June;

Kanguk, Mukundak, Peetak, Parmodak, Kaklok, Asanpuspak, Mahasastik, Churanak, Kurvak, Kedarak etc.

These were attributed to possess medicinal properties of alleviating vata and pitta, acting as tonic and sweet in taste. Among all these Sastik variety has been considered to be the best for medical uses. Sastik rice possesses medicinal properties similar to the Lal shali (red rice).

Main season or rainy season (these were known as Brihi) varieties;

Krishnabrihi, Shalamukh, Jatumukh, Nandimukh, Lavaksak, Tvaritak, Kukutandak, Paravata, Patal etc.

They are said to have sweet taste, aggravate pitta, and have other properties similar to sastik rice varieties. The variety Krishnabrihi was considered to be the best for medicinal properties among all the brihi rices.

Besides above, there were rice varieties grown in jhum fire burnt areas on cleared forest lands, kaidar (low land) varieties where rice was grown in submerged condition and transplanted (one time or several times) as well as ratoon varieties. The medicinal properties of each of them were thoroughly studied and had been described.

In all 38-40 varieties had been mentioned in the text but there might have been 20-25 more varieties for other soil conditions, in addition to these as well. The existence of large number of varieties about 4500 years ago gives credence to the wisdom of Indian farmers as well as to the oldest cultivation of rice in India. Still the archaeological evidences lack proper support to the above view. There is therefore urgent need to carry out further archaeological excavations especially in relation to rice cultivation and domestication.

It is interesting to find that still some of the rice varieties in Indian states are under cultivation. The slight changes of names are inevitable. These are:

Assam	:	Basmati (Vasumati)
Andhra	:	Krishna-katukolu (Krishna brihi), Sathi (Sasti), Kalam Kathi (Kalam), Lal dhan (Lal Shali), Makarhanda (Mukandak), Kaldkrishna (Krishna brihi)
Bihar	:	Kalandam (Kalam), Sathika (sastika)
Gujrat	:	Sathi (Sastik).
West Bengal	:	Churnock (Churanak), Kalma (Kalam), Satika (Sastik), Basmati (Vasumati)
Uttar Pradesh	:	Basmati (Vasumati), Sathi (Sastik)
Punjab	:	Basmati (Vasumati), jatu (Jatumukh), Lal Dhan (Lal shali)
Orissa	:	Basmati (Vasumati), Sathi (Sastik)
Karnataka	:	Masali (Mahashali)
Maharashtra	:	Basmati (Vasumati), Kolam (kalam), Lal sal (Lal Shali), Krishnasal (Krishna brihi), Mohadi (Mahadushak), Pandharisal (Pundreek shali).
Tamilnadu	:	Kuruvai (Kurvak)
M.P.	:	Pandhri Luchai (Pundreek)
Jammu & Kashmir	:	Basmati (Vasumati)