Popular Article

e-ISSN: 2583-0147

Health Benefits of Medicinal Rice

The invention of green revolution made high yielding rice varieties more popular than the traditional varieties. In India, Ayurvedha and Unani medicinal system depends on the medicinal properties of rice. Traditional rice varieties has been extensively used to control high blood pressure, regulating blood sugar level, body balance, diarrhoea in children, digestive system disorders, skin inflammation, and certain other specific diseases. And also rice milling place a major role in the nutrient condent. It is done for polishing rice grain, involves discarding bran or brown outer layer of rice kernel which has considerable nutritional value and health benefits. Processed rice is lacking in many important minerals namely phosphorus (for strong bones and dental health), potassium (maintains blood pressure), manganese (required for various chemical processes in the body) and sulphur (main constituents of proteins in our body). So Polishing should be kept to a minimum during milling.

BROWN RICE

The unpolished rice kernel which is rich in thiamine, niacin, riboflavin, metal, calcium, proteins and fats.

WHITE RICE

The well-polished rice is called white rice and it possesses very little amount of mineral nutrients when compare to the brown rice. It looks pure, white in colour.

PARBOILED RICE

The rice is steeped and boiled before the milling process to make holding of the nutrients in the kernel.

BASMATHI

It is originated in food hills of Himalaya and it is meant for its cooking quality and fragrance and also called as "Prince of rice".

Amudha K

Assistant Professor (Genetics and Plant Breeding) Department of Rice Centre for Plant Breeding and Genetics Tamil Nadu Agricultural University Coimbatore Tamil Nadu India– 641003

Mahendran Ramachandran

Assistant Professor Genetics and Plant Breeding SRM College of Agricultural Sciences SRM Institute of Science and Technology Vendhar Nagar Baburayanpettai Madhuranthagam Taluk Tamil Nadu, India

Vanitha Jayaraman

Genetics and Plant Breeding SRM College of Agricultural Sciences SRM Institute of Science and Technology Vendhar Nagar Baburayanpettai Madhuranthagam Taluk Tamil Nadu, India

Selvakumar Gurunathan

Assistant Professor Genetics and Plant Breeding SRM College of Agricultural Sciences SRM Institute of Science and Technology Vendhar Nagar, Baburayanpettai Madhuranthagam Taluk Tamil Nadu, India

> Corresponding Author Amudha K amudha_pbg@yahoo.com

-

Historically, farmers have conserved and cultivated a large number of traditional paddy varieties since this serves several purposes - they are suited to the local climate and soil type, they have a high degree of resistance to pests and diseases and they are known to have specific nutritional and therapeutic properties. In recent times, the Government Agriculture and Extension programmes have been supplying only modern seed varieties which are either hybrids or other modern varieties. This has resulted in a loss of valuable traditional genetic resources, loss of knowledge of cultivating these varieties and erosion of knowledge and traditions about the uses of these varieties. As a result of the above there have been several problems such as decline of soil fertility, resistance of pests to chemicals, decline of yields. There is also an increasing realization that this approach is leading to a severe pollution of the land, water and air as well as several diseases that can be traced to chemical cultivation. Currently, the Government is keen on efforts to encourage sustainable agriculture approaches and Prof. M.S. Swaminathan (the father of India's Green Revolution) has given a call for - "Ever Green Revolution" which can be a sustainable approach.

TRADITIONAL RICE VARIETIES CONSERVED BY CENTRE FOR INDIAN KNOWLEDGE SYSTEMS

There are several community based organizations in India and South Asia that are conserving traditional varieties of seeds. Centre for Indian Knowledge Systems is currently conserving over 108 traditional rice varieties of India.

S.No	Name of the Variety	Duration in days
1	Adukkunel	140
2	Ambemohar	135
3	Anaikomban	125
4	Anandanoor sanna	120
5	Arcot Kitchili	120
6	Arikiravi	130
7	Arupatham kuruvai	105
8	Arupatham samba	120
9	Athur kitchili	130
10	Basumathi	130
11	Bayakundathan	135
12	Cochin Samba	140
13	Cuddalore Seeraga Samba	130
14	Garudan Samba	130
15	Illuppaipoo samba	120
16	Iraivaipandi	120
17	Jawadhu malai nel	140

18	Jil Jil Vaigunda	140
19	Jiljeera	140
20	Kadaikazhuthan	170
21	Kaivarai Samba	130
22	Kalanamak	120
23	Kalarpalai	130
24	Kaliyan Samba	160
25	Kallundai	110
26	Kallurundaiyan	120
27	Kamban Samba	140
28	Kandasali	135
29	Kappakkar	150
30	Karikalava	125
31	Karunkuruvai	125
32	Karunseeraga samba	125
33	Karuppu Seeraga	120
	Samba	
34	Karuppukowni	130
35	Karuthakaar	120
36	Katcha Koomvazhai	170
37	Katta samba	150
38	Kattu Kuthalam	125
39	Kattu Samba	135
40	Kattu vanibam	115
41	Kattuyanam	150
42	Kichilisamba	140
43	Kollikaar	130
44	Konakkuruvai	120
45	Koomvazhai	130
46	Kothamalli Samba	135
47	Kottara samba	130
48	Kowni nel	160
49	Kudaivazhai	130
50	Kuzhiyadichan	120
51	Kullakkar	120
52	Kuruvai	125
53	Kuruvai-	140
	kalangiyam	
54	Kuruvikaar	110
55	Mappillai	160
	Samba	
56	Mathimuni	135
57	Mottakuur	125
58	Mozhikaruppu	120
	Samba	
59	Muttakaar	120
60	Navara	90
61	Neelan Samba	180
62	Norungan	124
63	Orissa vasanai	120
	Seeraga Samba	
64	Ottadai	150
65	Ottu kitchil	115
66	Pal kudaivazhai	130
67	Panankaattu	135
	kudaivazhai	
68	Pattaraikaar	105
69	Perum Koomvazhai	150
70	Perungkaar	125
71	Pisini	130
72	Poompalai	150

73	Poongkaar	100
74	Poovan Samba	145
75	Puzhuthi Samba	140
76	Ramakalli	120
77	Rasakadam	125
78	Sadakaar	105
79	Salem Samba	135
80	Salem Sanna	125
81	Samba	165
82	Samba Mosanam	170
83	Sandikaar	160
84	Sanna Samba	140
85	Seeraga samba	130
86	Sempalai	105
87	Sivappu kowni	130
88	Sivappu kuruvikaar	125
89	Soorankuruvai	135
90	Sornavari	125
91	Thanga Samba	165
92	Thenkaipoo samba	120
93	Thirupathi saram	120
94	Thooyamalli	140
95	Vadan Samba	160
96	Vaigunda	160
97	Valan nel	160
98	Vallarakkan	160
99	Varappu kudainchan	115
100	Vasanai Seeraga	120
	Samba	
101	Vasaramundan	110
102	Veethivadankan	129
103	Veliyan	175
104	Vellai kudaivazha	130
105	Vellai kuruvikaar	120
106	Vellai poongkaar	80
107	Vellaikaar	110
108	Vellaimilagu Samba	165

TRADITIONAL RICE VARIETIES AND THEIR MEDICINAL PROPERTIES

In contrast to negative thoughts on the rice pertaining to the human health, our ancestors identified and were being consumed the following medicinal rice viz.,

Name of the rice variety	Medicinal property(ies)
Kavuni, Black	Anti-microbial
Kavuni	Lowers blood sugar levels
Kaivara Samba, Kattu Yanam	Lowers blood sugar levels
Poongar	Consumed by women after puberty
Maapillai Samba	Hypocholesterolemic effect Anti-cancer activity Improves fertility in men

Besides, rice bran extracts used to cure the beri-beri in Philippines. Acute inflammation being treated with boiled rice in Malaysian people also they are using dehydrated rice sprouts to treat the stomach issues like digestions and gas. The Cambodians are using rice husk to treat the dysentery. Chinese are using the rice to treat the weak stomach. In India, every year large number of rice varieties released adapted to different types of soil conditions such as dry land, upland, lowland, rainfed medium land and to climatic vagaries such as drought, late rain, early rain, flooding, excessive cold, and so on. Even though, after the green revolution there is a loss in genetic diversity of rice. So there is a need for the detailed study of the trend of diversity in Indian rice varieties, especially for their medicinal purposes.

CONCLUSION

The scientists and common people having wrong thoughts on rice due to increases in the diabetes as well as nutritional deficiency with people those are having rice as a staple food. These thoughts can be broken by exploring, analyzing and documenting the medicinal properties and nutritional values in the traditional rice varieties. Currently, crop scientists are exploring the traditional rice varieties for their medicinal values. Consequently, the medicinal properties of the traditional rice can be introgressed to high yielding rice varieties can help to exploit the medicinal values of the rice by the maximum population.