

A quick survey of wheat diversity in India

Author - Sreedevi Lakshmikutty, Published on - 6.12.2019

The Emmer and the Paigambari wheat date back to the Pharaohs and the Indus Valley Civilisation respectively

“It seems like the bread has come straight from the tombs of the Egyptians to my plate,” complained my husband. I had brought home an emmer wheat loaf. It was hard and nothing like the bread he recognised. But I was full of facts about the antiquity of emmer, its popularity from the time of the Egyptian pharaohs and its superior nutritive qualities that an artisanal baker in an organic farmers’ market had told me. When we lived abroad, I would regularly get home Kamut loaves and baguettes, spelt muffins, sourdough bread with emmer and much more from the weekly organic farmers market. Back home in India, life only sent rotis our way and what was available as whole wheat bread in the shops was a distant cry from what we experienced in Northern Europe.

Paigambari wheat bowl (Serves 4)

[Wash and soak a cup of wheat for 24 hours. Wash again, drain and leave in a colander for about 8-10 hours for it to sprout. Pressure cook with three cups of water and salt, \(three whistles should do\). Lightly sautee the cooked wheat and keep aside. Boil four medium sweet potatoes \(or potatoes \) and saute with pepper and salt. Saute three to four cups of vegetables \(carrots, beans, cauliflower, bell peppers all cut lengthwise\) Put them into a bowl and top with peanuts.](#)

A farmer sent me what he called Khapli Gehu and I realised that it was emmer wheat. Rotis made from this were easy to digest and light on the stomach. I found that emmer is an ancient wheat grain, one of the parents of the modern-day bread wheat. I also learnt that emmer wheat rotis keep well and, in Maharashtra where it is grown, farming families keep the rotis for many days. It also made nice dosas and sourdough loaves. It is high in fibre and relatively low in gluten. It is brown, long grained, looks like a paddy seed and is covered by husk and needs to be hulled to be ready for grinding.

Wheat antiquity

- Einkorn of genus Triticum species monococcum is the oldest known variety
- Emmer (Triticum turgidum dicoccum) and Khorasan (Triticum turgidum) Kamut comes next
- Durum (Triticum turgidum durum) follows. Examples of durum wheat in the Indian context are Bansi and Kathia)
- The most modern is bread wheat (Triticum aestivum) with many sub species, one of which is Paigambari
- Most varieties we commonly use belong to the bread wheat category.

Soumik Banerjee, agro-biodiversity expert, has been working with farmers to characterise rice, wheat and cotton diversity. Along with Bhairab Saini, a seed conserver farmer, he maintains a wheat diversity block where they grow and characterise about 35 traditional wheat varieties collected from different parts of the country. Soumik says, “The emmer wheat grown in India has come from Ethiopia and is hardy and resistant to heat and is mainly grown in the Deccan Plateau — northern Karnataka and southern Maharashtra. We are trying to grow a variety of khorasan (traded as kamut) in Kashmir and in Himachal high up in the mountains.” Wheat diversity is tougher to experience than rice diversity since we use wheat as flour and all flours look the same, unlike rice where we see the white, red, black, brown and colours and the various sizes and shapes. The Paigambari wheat appears as a small grain almost like sorghum, round, shiny like a pearl — the prettiest wheat grain I have seen. Farmers call this “sugar free”; we don’t know why. It has lower gluten and higher protein than many other varieties. Soumik shared that Paigambari is an ancient wheat variety that originated in India. Its antiquity dates back to the Indus valley civilisation. Again, it is light to eat and quite delicious.

Wheat facts

- Modern classification of wheat is based on the number of chromosomes it contains.
- The more ancient varieties contain fewer chromosomes and have a simpler gluten structure.

A salad made of Paigambari wheat | Photo Credit: Special Arrangement

It is a privilege to have access to such grains that have not been changed across millennia. They have with civilisational memories embedded in them. For this, we have our farmers to thank. Eating diversity and paying the farmer is a way all of us can contribute to agro-biodiversity conservation.

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