

## MILLETS ANALYSIS

Millets are traditional grains, grown and consumed on the Indian subcontinent for more than 5000 years. They are nutri-cereals composed of **sorghum, pearl millet, finger millet (major millets), foxtail, little, kodo, proso and barnyard millet (minor millets)**. These nutri-cereals, being one of the most nutritious and important dry-land crops, are drought-tolerant and can be grown with minimal agricultural inputs. The development of appropriate seed certification and quality management protocols is central to preventing the post-harvest losses of millets. From farm to fork, there are several stages through which the quality of these grains needs to be monitored. Across the world, different types of millets are grown, and each grain is unique. Hence, internationally, varied parameters, standards, and grades have been devised for every millet variety, depending on its procurement and shelf-life.

### NUTRITIONAL VALUE

Millets serve as a good source of protein, micronutrients and phytochemicals. They contain 7-12% protein, 2-5% fat, 65-75% carbohydrates and 15-20% dietary fibre. They contain phytates, polyphenols, tannins, anthocyanins, phytosterols, and pinacosanols, which contribute to antioxidant activity and play an important role in ageing and metabolic diseases. All millets have high antioxidant levels. Millets contain fewer cross-linked prolamins, which contributes to their higher digestibility.

### SERVICES

- **Detection of allergens, anti-nutritional factors**
- **Compositional analysis**
- **Filth test for detection of foreign matter**
- **Microbiological analysis and Heavy metals**
- **Analysis of Genetically modified organisms -**
- **Antioxidants such as BHA (butylated hydroxy anisole), TBHQ (tert-butyl hydroquinone)**
- **Detection of various adulterants**
- **Determination of organic and inorganic residues and contaminants**
- **Mycotoxin analyses, multi-toxin analysis: pyrrolizidine alkaloids, tropane alkaloids, ergot alkaloids**
- **Plant growth regulators like chlormequat, mepiquat**
- **Fumigants like phosphine, methyl bromide and sulfur dioxide**
- **Naturally occurring Toxic Substances like, Aflatoxin, Ochratoxin A and Deoxynivalenol**

### OUR LAB LOCATIONS

- 📍 **Bangalore**
- 📍 **Delhi/ NCR**
- 📍 **Gujarat/ Unjha**
- 📍 **Andhra/ Guntur**

