

## 1. XRF (X-ray Fluorescence Spectrometer)

### Instrument Details



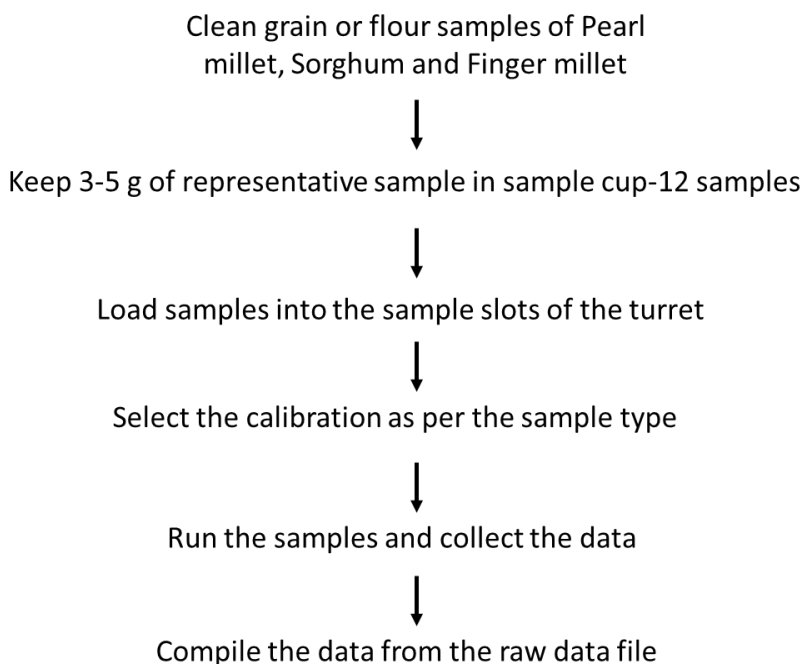
**Make:** Shimadzu

**Model:** EDX-7200

**Specification:** Energy Dispersive-X-ray fluorescence spectrometer with 12 sample turret

### Working Principle

The samples taken in sample cup with x-ray transparent bottom film are irradiated with x-rays corresponding to specific element and the fluorescence emitted from minerals in the sample is measured by the instrument as counts per second. The instrument is calibrated for sample matrix differences using standard wet chemistry values to cover expected range in samples. This instrument is calibrated for grain samples of Pearl millet and Sorghum (Iron and Zinc), flour samples of Pearl millet and Sorghum (Iron and Zinc), and grain samples of finger millet (Iron, Zinc and Calcium).



## Applications

1. Non-destructive high throughput analysis of Iron, Zinc, and Calcium in Pearl millet, Sorghum and Finger millet samples

## User instructions

1. Clean grain samples without glumes or dust
2. Representative sample of 3-5 g to be submitted

**Contact:** Dr. Venkateswarlu Ronda

Phone: 040-24599319

E-mail: [venkat@millets.res.in](mailto:venkat@millets.res.in)

| Parameter                                   | Industry | University | National Labs |            |
|---------------------------------------------|----------|------------|---------------|------------|
| Iron and Zinc<br>(Pearl millet and Sorghum) | Rs 300   | Rs 200     | Rs 250        | Per sample |
| Iron, Zinc and Calcium (Finger millet)      | Rs 350   | Rs 250     | Rs 300        | Per sample |
| GST at the rate of 18 % extra               |          |            |               |            |

**Kindly include this note in your requesting letter exactly as it is:**

"Content of this report is meant for our information only and we will not use the content of this report for advertisement, evidence, litigation or quote as certificate to third party"