

LOCAL MANUFACTURED FARMER RAIN GAUGES IN MALI

In the reason of increasing request of the populations in the meteorological assistance and the lack of rain gauges imported and its high cost, the National Meteorological Agency has initiated a project of a local rain gauges production, is the object of this note.

The farmer rain gauges with 100 cm² ring² weighing 200 g is designed to measure liquid precipitation as representative as possible in various Sahelian country and other.

1. DESCRIPTION

The farmer rain gauges is composed of:

- a graduated plastic bucket by fields in millimeter of rain;
- a receiving ring of 100 cm² of surface;
- a metal support provided with two smooth iron rings welded on to the higher edges to maintain the bucket vertical and stable.

GENERAL SPECIFICATIONS

The dimensions of rain gauges were specified according to the daily precipitations on the processing areas.

The material constituting the rain gauge is constituted by polystyrene in the form of granules in order to confer maximum strength and chemical resistance when the temperature of the surface varies between 0 and 80 ° C, the ambient relative humidity between 5 and 100 % and when the solar radiation reaches 2.3 KJ / cm² / day with an average annual rate of 8% UV.

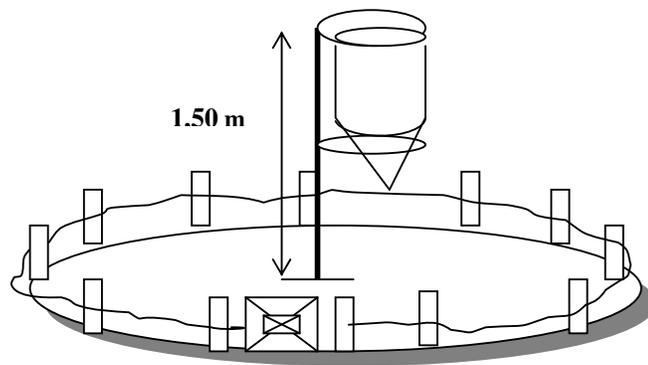
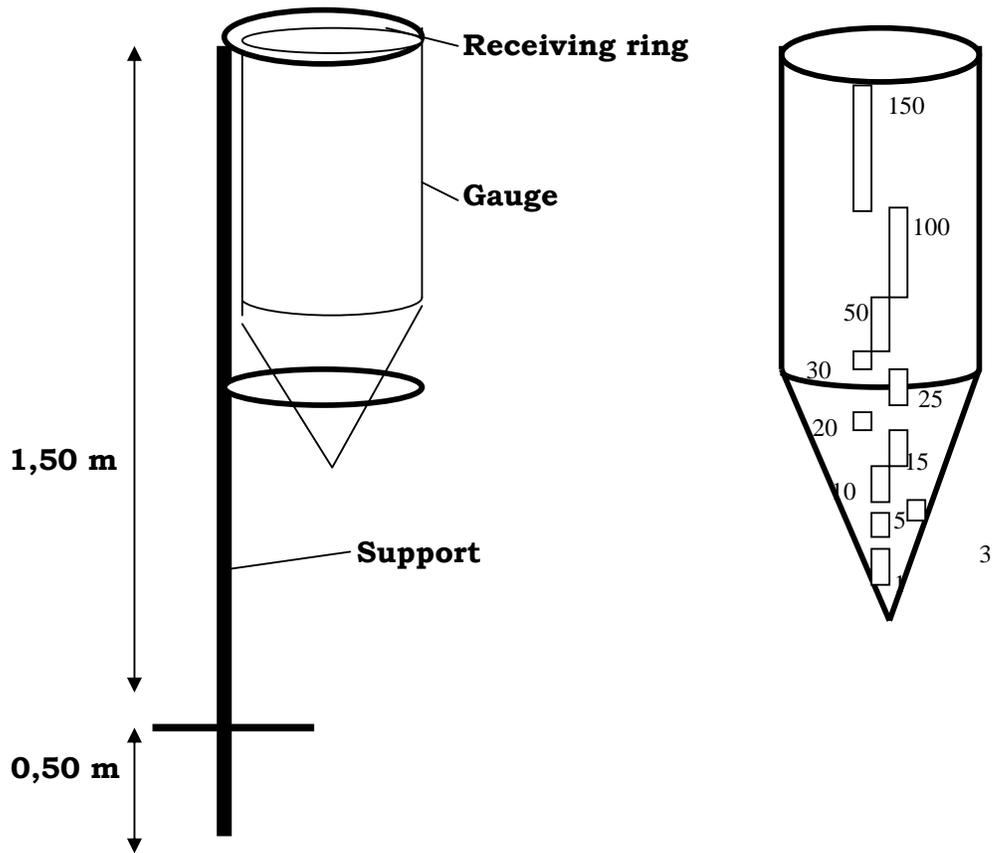
The inside diameter of the gauge measured on the edge following two perpendicular directions, should be 112.8 mm (+ 0.5 %) . Special attention must be given to gauge high mechanical stiffness in the area of application mentioned above.

The graduations will be indicated by hatched fields, alternatively on the left and on the right of a central line, with indication of the figure to the top of the hatched part. The graduations will correspond to the received quantities of water when there will be 1, 3, 5, 10, 15, 20, 25, 30, 50, 100 and 150 mm of rain.

Below the edge, the rain gauge is provided with a solid ring to facilitate its installation on the support.



FARMER RAIN GAUGES



Enclosure protection of the gauge