

Determining FOO

You need to use the entire sample you have harvested from the calibration ring.



If you have harvested a large quantity of green material, you may need scales that go to 500g as the starting material may be heavy and bulky. Chop the sample down into 3-4cm pieces using scissors or secateurs.

Place an empty plastic Chinese takeaway container on the scales, allow to settle until the weight appears on the display. Hit the 'tare' or 'zero' button and record the weight (A). Next, put your chopped up sample into the container and then record the weight on the scales (B). Place the sample into the microwave together with a small cup of water (helps absorb the microwaves as the sample dries out and avoids fires!). Depending on sample volume, water content and microwave wattage, initial drying times can take up to 5 minutes. If using a 1000W microwave, it is better to start with shorter drying times (i.e 2 minutes initially). Once finished, pull the sample out of the microwave and weigh and record weight. Stir the sample around and place sample back into the microwave for another 1-3 minutes and re-weigh and record weight. Repeat this process until the weight matches the previous sample or is within 1g of previous sample and record this weight (C). This indicates that the sample has no more moisture to loose and is at a constant weight. If done correctly, there should be no smoke or fires!

To calculate FOO:

= C-A

Example: Empty container (A) = 25g

Container + wet sample (B) = 75g

Container + dry sample (C) = 40g

40 - 25 = 15g

That is, the weight of the dry material ONLY weighs 15g. In 0.1m² (area of the calibration ring) there is 15g of dry mater, therefore in 1 ha, there is 1500kg DM. (10,000 m² in 1 ha).

(i.e 0.15kg x 10,000m²) = 1500kg