



## **Crop residues quantification to obtain self-consumption compost in an organic garden**

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This research focuses on quantifying the crop residue left after the campaign fall/winter (2011) for the organic garden crops of Agricultural ETSI, located in practice fields, to get compost for self-generated residues arising from within their own fields. This compost is produced by mixing this material with an organic residues source animal. In this way the plant organic residues provided the nitrogen required for an appropriate C/N and the animal organic residues can provide the carbon amount required to achieve an optimal scenario.

The garden has a surface area of 180 m<sup>2</sup> which was cultured with different seasonal vegetables, different families and attending practices and species associations' rotations, proper of farming techniques. The organic material of animal origin referred to, is rest from sheep renew bed, sustained management support the precepts of organic farming and cottage belongs to practice fields too.

At the end of crop cycle, we proceeded to the harvest and sorting of usable crop residues, which was considered as net crop residues. In each case, these residues were subjected to a cutting treatment by the action of a mincing machine and then weighed to estimate the amounts given by each crop.

For the sheep bed residue 1m<sup>2</sup> was collected after three months having renewed. It had been made by providing 84 kg of straw bales in July and introducing about 12 Kg each. The herd consisted of three females and one playe. Each one of them was feed 300g and 600 g of straw per day. Two alternating different pens were used to simulate a regime of semi-intensive housing.

A balance on how much organic residue material was obtained at the end and how much was obtained in the compost process is discussed in terms of volume and nutrients content is discussed.