TRAINING MATERIAL

Title:

Ashes from natural wood chip under fireplace (ID:321)

Training:

What is the product?

Wood ash made from boilers of medium or large power is known for its value as a phosphorus, potassium and magnesium fertilizer and a basic soil improver.

Who is the vendor of the product?

Energies Bois Sud-Cornouaille (http://www.energiesbois29.org/) is a cooperative which brings together local stakeholders, public or private, customers or suppliers to produce goods and services for collective interest, on the territory of Cornouaille.

It structures the local wood energy sector of Quimperlé Communauté and Concarneau Cornouaille Agglomeration.

Which other products and services are provided by the vendor?

Energies Bois Sud-Cornouaille sells wood chips and mulching and offers expertise about energy too.

Which are the advantages of the product and the problems addressed?

The principle advantage is that this is 100 times more concentrated in ashes than in wood and 100 to 150 € of fertilizer are saved per ton of spreaded ash

The principle problem is that the spreading needs to be mastered.

Which is the nutrient content of the product?

The average formula in total elements N – P – K - Mg is 0 – 4 – 9 – 5, variable in the following ranges 1 to 6 for P_2O_5, 4 to 12 for K_2O and 3 to 7 for Mg with a neutralizing value of about 45% (35 to 55%). The ash mineral composition depends on tree species that are burned, but also and especially on the soils richness on which they grew. Another factor is the boiler operating mode, in particular the combustion efficiency (the ash represents 1 to 2% of burned wood, a two-to-one ratio, and it will be the more concentrated as the combustion will be the more complete).

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Which equipment and methods can be used to apply the product?

If raw ash is applied (boiler outlet), they are powdered and therefore very sensitive to the wind during the application. We must therefore foster gravity spreaders with mechanical transport as shown below and avoid windy weather. The regularity of the dose depends on it.

How to use the product?

On the basis of lime requirements, a maintenance dose could be 3 t / ha every 4 years.

At this dose, sufficient maintenance is provided in magnesium, and almost enough potassium for most of field crops.

In poor soil, phosphorus intake may be insufficient depending on the crop.

For a pasture meadow, those mineral inputs are largely sufficient.

Which are the authority permits and in which EU countries?

In France, it can be used via French spreading planning because it is used as French waste authorized by French law.

How much does it cost?

No price has been fixed yet but its inherent value can be evaluated about 130 € / t.

For more information: https://nutriman.net/farmer-platform/product/id_321

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