

Nutrient Management and Nutrient Recovery Thematic Network www.nutriman.net

EIP-AGRI practice abstract

Short title:

Ashes from	natural	wood	chip	under	the	firep	lace

The ash under the fireplace is generated in larger amounts and concentrates the non-combustible minerals of the wood (1 to 2% of the initial mass of the wood). With significant levels of lime, magnesium, potassium and phosphorus, this fraction generated up to 95% of the total ash production presents valuable agronomic advantages. A return to the ground allows benefits from the fertilizing and amending value of these ashes. They generally contain phosphorus contents around 20 to 50 g P2O5/kg of raw material, and potassium around 80 to 100 g K2O/kg.

It is estimated that a soil application of 2,5 t/ha every 3 years is generally enough for soil maintenance, but this dose should be considered according to the culture system needs and the soil pH. Cationic macro elements Ca, K and Mg in ash are readily available to potentially available for cultivation. With a neutralizing value sometimes reaching more than 50%, ashes are a liming material that can increase the pH by 1 point after a cumulative application of 7 to 8 t/ha.

The potential risks associated with this use of ash are due to the presence of metal trace elements (MTE), at higher or lower concentrations, depending on the origin of the wood and the combustion technic. To limit these risks: choose ashes from natural wood (unadjusted) and from unpolluted media.

Under these conditions, wood ash represents a substantial saving for the farmer, from 100 to 150€/t.

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

