

低钾生物质灰肥用价值综述 Fertilization Value of Biomass Ash with Low Potassium

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摘要: 在国内外相关研究的基础上,对木灰这类型生物质灰的组成和物理、化学特性进行分析,并阐述了木灰作为肥料施用后对作物、土壤表层植被、土壤微生物群和环境各方面的影响。木灰的K含量不高,但是具有较高的pH值,对酸性土壤的改良作用很明显。pH值的提高可以改变土壤中微生物结构,促进微生物的活动,增加土壤肥力。同时,木灰还具有大量元素富集的特点,施用后会改变土壤中元素的构成,增加土壤中N、K等植物生长必需元素的可利用量,从而促进作物的生长。根据目前研究情况,木灰肥用不但实现了元素循环,而且一定程度上提高和改良了土壤特性。 The typical components and physical / chemical characteristics of the ash were introduced based on the relative research works carried out all around the world, as well as its influences on plants, upper soil layer vegetation, soil microbial population and environment after application. Generally, this kind of ash has low potassium content, but high pH value due to high Ca content. It' s a good remedy for acid soil. The high pH value is also valuable for improving composition of soil microorganism, enhancing their activities and thereafter increasing the fertility of soil. Meanwhile, the ash is rich in certain elements, which are critical to modify the elements constitution of soil and increase the availability of N and K in usual situation. As far as current research is concerned, the fertilization of wood ash achieves element circle, improves soil characteristic to some degree.

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