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I International  
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in Mountain Regions

Book of Abstracts



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## **Sy16006**

### **Recovery of mountain rangelands**

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In the Northeast of Portugal, sowing rainfed pastures based on self-reseeding annual legumes could be a viable option to return abandoned cropland into agriculture. In this context, an experiment was carried out in Vila Meã (Bragança) since autumn 2012, which has as main goal the evaluation of the best technology to recover abandoned cropland or unproductive pastures, based on either spontaneous vegetation or sown species, in any case considered as rangeland areas. The experiment comprised the study of 12 treatments, three sowing techniques, such as, sowing with sheep trampling, sowing with scarification, direct sowing and no sowing (existing vegetation), crossed with three types of fertilization, organic fertilization, mineral fertilization (Ca+P+K), and no fertilization. The main results showed an important increase in dry-matter yields, when organic fertilization was applied, allowing the replacement of the conventional mineral fertilization. In respect to sowing techniques, the sheep trampling presented dry-matter yields with no significant differences to, sowing with scarification and direct sowing techniques. All macronutrient contents, except for potassium and magnesium, presented enough values to satisfy the cattle and sheep needs. In respect to the micronutrients, the values encountered were enough to satisfy the needs of these livestock, except for copper.