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MELISSOPALLINOLOGY CHARACTERIZATION OF PORTUGUESE HONEYS WITH PROTECTED DESIGNATIONS OF ORIGIN

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Introduction: The European Union created, through Regulations No. 2081/92 and No. 2082/92, Protected Designations of Origin (PDO) as an important instrument for valuing agricultural products with distinctive particularities, demanding for this purpose the establishment of requirements set out in a specification book.

Aims: In 1994, Portugal saw nine PDOs recognized by the EU for Portuguese honey. Given the limited information available at that time and the interval since its approval, it is expectable to find some changes in the flora underlying the aforementioned honeys, as a result of modifications in the land use and/or climate changes. The “BeeLand” project aims to update the regulated specifications for several Portuguese PDO honeys. In this work we present the first results of the qualitative and quantitative melissopalynology analysis of three PDO honeys (Mel do Parque de Montesinho, Mel da Serra da Lousã and Mel da Terra Quente).

Materials and Methods: Qualitative melissopalynology analysis was performed using the acetolysis method of Louveaux et al. [1] while quantitative analysis followed the filtration method described by Von Der Ohe et al. [2]. Overall 22 samples were studied.

Results: The first results showed that the main pollen spectrum for each PDO is:

Mel do Parque de Montesinho: *Castanea sativa*, *Rubus* spp., Fabaceae (genus *Cytisus*, *Genista* and *Ulex*); Mel da Serra da Lousã: *Erica* spp., Fabaceae (genus *Cytisus*, *Genista* and *Ulex*), *Eucalyptus* spp., *Castanea sativa*, *Rubus* spp.; Mel da Terra Quente: *Lavandula pedunculata*, *Rubus* spp. Fabaceae (genus *Cytisus*, *Genista* and *Ulex*), *Cistus ladanifer*, *Echium* spp, *Castanea sativa*. Regarding the results of the quantitative analysis, these PDOs were classified as Class III.

Conclusion: The first results highlighted differences between the nectar sources defined on the current specifications books and the actual sources explored by bees to produce the PDO honeys under studied, demanding updating.

Keywords: Portuguese PDO honeys, melissopalynology, specifications.

References

- [1] Louveaux, J., Maurizio, A., Vorwohl, G., 1978, 59:4, 139-157
[2] Von Der Ohe W, Oddo LP, Piana ML, Morlot M, Martin P, 2004. 2004; 35(Suppl. 1):S18–25

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ASSESSING BEEKEEPING POTENTIAL IN A PORTUGUESE AREA WITH HONEY PROTECTED DESIGNATION OF ORIGIN

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Introduction: Beekeeping plays an essential role in the sustainable development of rural areas, producing economic, social and environmental benefits. From the socioeconomic point of view, it is an income source to the local communities through the sale of its products and the pollination services provided by honeybees, thus contributing to increase the yield of agricultural crops. On an environmental level, these pollinating insects ensure the regulation of multiple ecosystem services, such as conservation of wild plant species and provision of food.

Aims: This study aims to assess the beekeeping potential in a Portuguese area with honey protected designation of origin (PDO) following a multi-criteria decision analysis (MCDA) for



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