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**RESUMO**

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**ABSTRACT**

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Examples: Grasslands are regarded as important foraging areas for many insectivores in Europe, such as birds (Vichery, 2001; Barnet *et al.*, 2004) and bats (Güttinger, 1997) or amphibians and reptiles (Langton and Burton, 1997). However, the knowledge of the overall arthropod availability in such grasslands is scarce since many studies about insect populations concentrate on extensive grasslands on poor, dry, or wet soils and include only a few species or systematic groups (Ellgsen *et al.*, 1997; Gibson *et al.*, 1992; Hänsel and Plachter, 2004; Manhart *et al.*, 2004; Kruess and Tscharntke, 2002a, b; Wingerden *et al*., 1992; Sjödin, 2007a, b; Perner *et al*., 2005).

* 1. **Case presentation:**

This section should provide a detailed description of the patient's history, symptoms, physical examination findings, diagnostic tests, and treatment course. It should include enough detail to allow other healthcare professionals to understand the case and learn from it.

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This section should provide an interpretation of the case, placing it in the context of existing literature and knowledge. It should also identify the unique or interesting aspects of the case and make suggestions for future research or improvements in clinical practice.

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1. VELOSO, P. H. F., SACRAMENTO, V. de M., & ROYO, V. de A. (2022, October 11). USE OF RGB AS A QUANTITATIVE METHOD APPLIED TO THE TEACHING OF ANALYTICAL CHEMISTRY. Periódico Tchê Química. Dr. D. Scientific Consulting. Retrieved from <http://dx.doi.org/10.52571/PTQ.v19.n42.2022.01_VELOSO_pgs_01_12.pdf> (best presentation of the reference)
2. Cervelin, A.; De Boni, L. A. B. (2019). Construindo um espectrofotômetro com materiais reciclados. *Periódico Tchê Química*, 32(16), 1029-1033.
3. De Boni, L. A. B; Lima da Silva, I. N; Pereira, M. M. (2013). The production of biodiesel monitored with real-time laser spectroscopy: confirmation of the technique with proton nuclear magnetic resonance. *Southern Brazilian Journal of Chemistry*, 21, 19-30.

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