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SP - (16628) - MEDICINAL PLANTS AND STEREOISOMERY IN HIGH SCHOOL: A TEACHING SEQUENCE BASED ON MEANINGFUL LEARNING

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Short Abstract

The obstacles faced in learning stereochemistry include difficulties related to visualization and problems in the acquisition and mastery of concepts that are prerequisites for understanding and differentiating stereoisomers. In this extended summary, we propose the usage of a teaching proposal for teaching concepts of stereochemistry, based on the Meaningful Learning Theory and structured in the form of a didactic sequence, a Potentially Meaningful Teaching Unit (PMTU) using as a theme medicinal plants, since many of them contain chemical compounds that present chirality or diastereoisomerism, thus having their biological activity often determined by stereoisomerism. This unit, composed of five classes, was applied in two classes of third year of high school, totaling 42 students from a public school in southern Brazil. The data collected during the classes through questionnaires, concept maps and tests were analyzed based on Content Analysis. The results point to the potential to promote meaningful learning of concepts, overcoming the mere memorization of aspects such as nomenclature and classification, because in addition to encouraging the active participation of students, it uses the relationship with their previous knowledge and integrates them progressively with new knowledge.