Sasanil Plant for Biodegradable Glue

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In the current research a natural glue obtained from the mucilage of Sasanil (Cordia dentata) fruits, is presented. Its characteristics are biodegradable, non-toxic and with a low production cost. A similar extraction of the mucilage from nopal (Opuntia ficus-indica) methodology was used. In addition the use of ethyl alcohol is a great help to precipitate mucilages. In this particular case, ethyl alcohol helps to increase the adhesiveness of the glue obtained. Moreover we can say that the use of the fruits of C. dentata as raw material in the glue manufacture does not have a negative impact in the environment, emphasizing sustainable development, due to the high regrowth and reproduction that the tree presents. The effectiveness of the natural adhesive obtained from C. dentata fruits was proved and we also obtained an adhesiveness of 7 Kg / cm2, with a duration of 71.2 hours of glued. Also, we made comparisons among this glue produced from the mucilage of C. dentata fruits, against other commercial adhesive brands. Finally it is concluded that this natural glue has a sufficient strength adhesion to become an alternative to use in adhering school, office and home supplies.

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