عنوان مقاله:

Assessment of Vitamin Composition of Ethanol Leaf and Seed Extracts of Datura Stramonium

محل انتشار:

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خلاصه مقاله:

Background: Herbs have gained recognition as highly efficient tools in the treatment and management of diseases both in modern and traditional medicine. Datura stramonium is a good example of such a medicinal herb. D. stramonium is popularly called thorn apple or Jimson weed in the family of Solanaceae. It has both toxic as well as medicinal potentials. D. stramonium leaves, seeds, and stems have been extensively studied for various pharmacological properties. D. stramonium seed is among the top plants commonly abused as a drug by Nigerian youths. Chemical constituents are responsible for the medicinal potential of plants. Objectives: This study was planned to investigate and compare the vitamin contents of ethanol extract of D. stramonium leaf and seed. Methods: The determination of vitamin levels was carried out using the Association of Official Analytical Chemists (AOAC) and other standard methods. Results: The order of vitamin composition in both leaves and seeds was E>C>A>B۶>B۹>B۱۲>B۲>B۱>B۳ . Moreover, the concentration of vitamins E, C, and A, being the most abundant, was ۶.۶۵:۱.۶۴ mg/۱۰۰ g, ۳.۶۵:۱.۰۵ mg/۱۰۰ g, ۲.۳۸:۱.۸۲ mg/۱۰۰ g, for leaf and seed extracts, respectively. Further, there were significant differences (P<۰.۰۵) in the contents of vitamins A, C, E, and B۲ of the leaves and seeds, with the leaves having higher vitamin levels than the seed. Conclusion: The number of vitamins present in the samples may be responsible for the highly nutritious and medicinal properties of D. stramonium. From the results of this study, it is obvious that D. stramonium leaves and seeds can serve as good nutritional supplements, which may also provide the users with adequate nutrients that help with the management of various health challenges. However, further studies .are required to ascertain appropriate doses that could lead to toxicity

کلمات کلیدی: