PHYSICOCHEMISTRY AND PRELIMINARY PHYTOCHEMISTRY OF LEAVES OF SOME SUDANESE MEDICINAL PLANTS

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ABSTRACT

The leaves of *Datura innoxia, Datura stramonium, Albizzia lebbek, Albizzia zygia, Cymbopogon citratus* and *Cymbopogon schoenanchus* were selected for this study because of their public use in Sudanese folkloric medicine. Ash and moisture contents are physiochemical constants can be used as a reliable aid to check the identity, purity and strength and are of great values for characterization of the plant drugs. The extractions of any crude drug with a particular solvent yield a solution containing different phytoconstituents. In this study physicochemical parameters like the moisture and ash cntents were determined beside phytochemical study of the petroleum ether and methanolic extracts of the studied leaves. It is clear that the methanolic extracts weights are larger than those of the petroleum ether extracts and this indicates that these plants contain large quantities of polar compounds. *D. stramonium* methanolic extract is found to possess the larger weight, whereas *C. citratus* posses the least weight. The petroleum ether extract of *D. innoxia* is more than that of D. stramonium while it's methanolic extract is less than that of *D. stramonium*.The petroleum ether extract of *A. zygia* is more than that of *A. lebbek*, also the methanolic is found to be less than that of *A. lebbek*. The Rf values and the colours of the spots showed that *A. zygia* contains the largest number of spots whereas *A. lebbek* contains the least number of spots. The plates when sprayed with Vanillin/H_2SO_4 reagent, revealed larger numbers of compounds in the petroleum ether extracts, and this also indicates that this reagent is a good reagent for the separation of non-polar compounds *A. lebbek* and *A. zygia* leaves contain larger numbers of compounds than the other species.

Keywords: *Datura, Albizzia, Cymbopogon*, Physiochemistry, Phytochemistry.