The standard anatomical textbook of Islam: the manuscript of Tashrih-i Mansuri in National Library of Medicine-USA

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In the 15th century, Anatomy of the body written by Mansur ibn Ilyas contained anatomical illustrations. There are sets of full-page anatomical drawings with mixed Persian-Arabic labelling that illustrate arteries, veins, nerves, bones, muscles and a pregnant woman. No full-page anatomical illustrations of the body are preserved from the Islamic world before those which accompanied the Persian treatise composed by Mansur ibn Ilyas. His illustrated treatise, often called 'Mansur's Anatomy,' was dedicated to a grandson of Timur (Tamerlane) who ruled the province of Fars from 1394 to 1409 (797-811 H). It consists of an introduction followed by 5 chapters on the 5 'systems' of the body. A concluding section on compound organs, such as the heart and brain, and on the formation of the fetus, was illustrated with a diagram showing a pregnant woman. In these research, I focus on this book which has an old manuscript in National Library of Medicine in US.

Phytochemical constituents and antioxidant activities of banana flower of Musa x paradisiaca

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Frequent consumption of fruits and vegetables is associated with a lowered risk of cancer, heart disease, hypertension and stroke. This has been attributed to the presence of various forms of phytochemicals and antioxidants in the foods. Pisang Nipah (Musa x paradisiaca) was analysed in this study for its tannin, flavanoid, saponin, alkaloid, total phenolic content and antioxidant activities. Quantitative estimation of tannin, flavanoid and total phenolic were analyzed by uv-visible spectrophotometer, while saponin and alkaloid were analyzed by gravimetric method. Current study shows that banana flower contains crude chemical constituents of tannin (7.83%), flavanoid (0.16%), saponin (1.43%), alkaloid (1.56%) and total phenolic (2.98%). The antioxidant activity of the flower extracts was determined using the 1-diphenyl-2-picrylhydrazyl (DPPH) free radical scavenging assay. The study shows potent antioxidant activity in banana flowers, of which the ethanol extract demonstrated much stronger antioxidant activity than water extract with the IC₅₀ value of 29.75 μg/ml and 1.52 mg/ml, respectively. Increasing the concentration of the extract resulted in reducing the colour of DPPH solution. This study shows that antioxidative activities of banana flower may be a potential source of natural antioxidants with similar characteristics to the synthetic antioxidant, butylated hydroxyanisole (BHT).

Keywords: Banana Flower, Musa x paradisiaca, Phytochemicals, Antioxidant activity, DPPH radical scavenging