SIGNIFICANCE OF MICROSCOPIC CHARACTERS IN QUALITY CONTROL OF HERBAL TEAS

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INTRODUCTION

Nowadays, the usage of phytotherapeutics increased, as evidenced by the fact that 80% of the world's population applies some form of herbal medicine. Of all the phytopreparations, herbal teas are the most commonly used, due to the fact that they are widely present on the market. It is very important that herbal teas meet proscribed quality and safety standards. The quality of tea blends can be observed from two points of view: the first relates to adherence to the declared ingredients content, and the second to meeting the needs of users. Herbal tea´s quality can be assessed by using microscopic, macroscopic and foreign matter analysis.

OBJECTS

Evaluate the authenticity of five commercially available tea samples

Foreign matter analysis of one tea sample

Using morpho-anatomic characters investigated by micro- and macroscopic analysis

MATERIAL AND METHODS

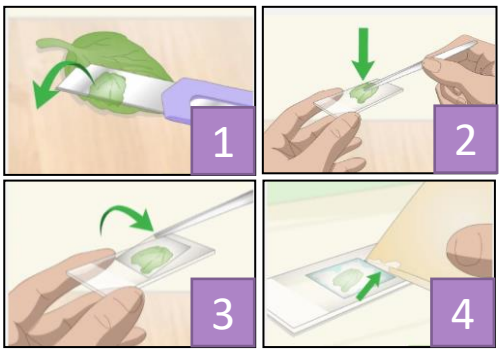
Softening of drug

ethanol, glycerol, chloral-hydrate

Observation

Macroscopy: observation of size, shape, texture color etc.

Microscopy: observation morpho-anatomic structures of plant tissues.



Pictures of observed material

CONCLUSION

The composition of four of the analyzed tea mixture samples corresponded to the content of ingredients declared on the samples' packing. One of the five analyzed samples did not meet the quality requirement because it contained herbal drugs not declared on the product's packing, but also did not contain drugs declared to be present. The degree of impurities determined in this tea sample was five times higher than the value proscribed by Regulation on the quality of tea, herbal tea and their products.