Determination of alcohol soluble extractive value

5 g of accurately weight powdered air-dried drug was macerated with 100 ml of alcohol in a closed flask for twenty-four hours, shaking frequently during six hours and allow standing for eighteen hours. It was then filtered rapidly, taking precautions against loss of solvent. 25 ml of the filtrate was evaporated to dryness in a tarred flat-bottomed shallow dish and dried at 105°C to a constant weight and weighed. The percentage of alcohol soluble extractive was calculated with reference to the air-dried drug.

The calculation was done by using formula given below.

Percentage of water soluble extractive value= Weight of the extract × 100 × 100/ 25 × weight of the sample taken

Determination of water soluble extractive value

5 g of accurately weight powdered air-dried drug was macerated with 100 ml of chloroform water in a closed flask for twenty-four hours, shaking frequently during six hours and allow standing for eighteen hours. It was then filtered rapidly, taking precautions against loss of solvent. 25 ml of the filtrate was evaporated to dryness in a tarred flat-bottomed shallow dish and dried to a constant weight and weighed. The percentage of water-soluble extractive was calculated with reference to the air-dried drug.

Extractive values are also useful to evaluate the chemical constituents present in the crude drug and also help in estimation of specific constituents soluble in particular solvents. Extractive values are primarily useful for the determination of exhausted or adulterated drugs. The extractive value of the crude drug determines the quality as well as purity of the drug. Water-soluble extractive value plays an important role in evaluation of crude drugs. Less extractive value indicates addition of exhausted material, adulteration or incorrect processing during drying or storage or formulating.