

Study of fermentation and quality control in Arishta and asava

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Ayurveda is the oldest science known to man for health, healing, prevention and longevity. It uses only natural and nontoxic medicines that do not have any side effects. Ayurvedic medicines comprises of various types. Arishta and asava are self generated herbal fermentations of traditional ayurvedic systems. The method of preparation of arishta and asava is known as sandhana kalpana in Ayurveda. i.e., the method of aqueous alcoholic extraction by fermentation is employed for producing arishta and asava. Thus arishtas and asavas are prepared by permitting the herbal juices or their decoctions to undergo fermentation with the addition of sugars. Fermentation is brought about by the addition of a source of sugar with Dhataki (*Woodfordia fruticosa*) flowers. The inoculum of yeast comes from *Woodfordia fruticosa* flowers, which contains the wild species of yeast. Additional spices are also added for improving their assimilation. The alcohol formed during the fermentation slowly but steadily extracts the active principles from the powdered drug mixtures or extracts. The market value of arishta and asava mainly depend on its quality. There are various standard operating procedures for the analysis of arishta and asava. The acidity, pH, alcohol content, total dissolving solvent, total reducing sugars, etc., are the various parameters used in determining the quality of arishta and asava. Though arishta and asava are preparations from plant materials, the role of micro organisms in this fermentation process is not at all realized. In fact all preparations are biomedical fermentations mediated by micro organisms. There is rarely any attempt to access the nature of micro organisms and their role in therapeutic properties. They possess better keeping quality which is likely due to the contribution of fermentation to preservation. The enhanced therapeutic properties which may be due to the microbial biotransformation of initial ingredients into more effective therapeutics as its end products. The potential of arishta and asava is controlled by the profile of chemical compounds, can be modulated based on the ingredients, type of fermentation and micro organisms involved. The study demonstrates the quality control procedures which help to retain its medicinal properties. This will make arishta and asava scientifically validated products for betterment of human life.

Biography

Remya P. M. completed post graduation in Analytical chemistry in 2011. Presently, she is working as a junior research fellow in University of Petroleum and Energy Studies, Dehradun. This work is actually her project as a part of her post graduation studies and has done from Arya Vaidya Pharmacy (Coimbatore) Ltd., Kanjikode, Kerala.

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