Standardization of Herbal Medicines and the Guidelines for the Standardization

Tejas Ahire[1, *], Seema Gosavi[1], Saurabh Sonawane[1], Riya Chaudhari[1], Pratiksha Bornare[1]
[1] Department of Quality Assurance, Sanjivani College of Pharmaceutical Education and Research, Sahajanandnagar, Kopargaon. Dist- Ahmednagar, Maharashtra, 423603, India

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[*] Address correspondence to this author at the Department of Quality Assurance, Sanjivani College of Pharmaceutical Education and Research, Sahajanandnagar, Kopargaon. Dist- Ahmednagar, Maharashtra, 423603, India; Tel: +91 9423306421; E-mail: tejasahire09@gmail.com

ABSTRACT
The use of medicinal plants for their therapeutic benefits is immemorial, leading to their global acceptability. The pharmaceutical market is significantly influenced by medicinal plants and herbal preparations as a source for pharmaceutical manufacturing procedures. Over the past few decades, the mass production of herbal preparations at an industrial scale as well as the adulteration of raw material and final products have raised serious concerns over its safety, purity, and efficacy. Standardization of medicinal plants and their preparations as per the current WHO guidelines is of prime importance to overcome quality issues. The guidelines aim at the identification of potentially hazardous contaminants and assessing the quality of the herbal material by various qualitative and quantitative means. Various methodologies, techniques, and procedures are prescribed in the guidelines for maintaining the overall quality of the finished herbal product. However, due to a lack of research data and technical constraints many of the accepted limits in the guidelines are a reference and extrapolation of research done in food science. Standardization is a crucial part of the quality assurance program so as to set proper norms for the manufacture of quality products thus contributing to the benefit of mankind. The current review aims at highlighting various standardization parameters and guidelines for the same.

Keywords: Medicinal plants, herbal medicines, quality control, standardization methods, analysis, phytochemical extraction.