

Advance Herbal Technology

Sarfaraz M. Kazi, Sanjay K. Bais, Rohini S. Mali

Fabtech College of Pharmacy, Sangola, Solapur, Maharashtra, India

Abstract: *Lately peoples are getting attracted towards herbal medicines due to many benefits. Herbal formulations have achieved extensive acceptability as medicinal agents for several diseases. Although, most of these applications are unnatural, it is however a known truth that over 80% of the world population depends on herbal medicines and product for healthful living. This is a development in the use of herbal product has again given height to various forms of misuse and impurity of the products leading to consumers' and manufacturers' dissatisfaction and in some instances fatal effects. The development of original analytical methods which can reliably profile the phytochemical arrangement, including quantitative analyses of marker/bioactive compounds and other major components, is a major challenged to scientists. Standardization is an important step for the organization of a consistent biological activity, a consistent chemical profile, or just a quality confirmation program for exposition and manufacturing of herbal drugs. In current review essay various convectional techniques as well as newer advances are described. Recent advancements includes DNA fingerprinting, metabolomics method, differential vibration polarography, chemometric, X-ray diffraction...etc. are practical. Capillary electrophoresis and chromatographic methods contributions towards standardization of herbal drugs is also documented.*

Keywords: Standardization, herbal drug, DNA fingerprinting, chrmatographic

REFERENCES

- [1]. Text book of Pharmacognosy (Nirali prakashan) page no 48- 49
- [2]. Text book of Pharmacognosy (kd tripati) page no 28 - 52
- [3]. Adam's KL, Palmer JD. 2003. Evolution of mitochondrial gene content: gene loss and transfer to the nucleus. *Molecular Phylogenetics and Evolution* 29: 380– 395.
- [4]. Alvarez I, Wedel JF. 2003. Ribosomal ITS sequences and plant phylogenetic inference. *Molecular Phylogenetics and Evolution* 29: 417– 434.
- [5]. Abdel Kawy, M. A, Haggag, E. G., Abdel Motaal, A. A, and Eissa, N. A (2012). Quality control of certain slimming herbal products present in the Egyptian market. *Life Sci. J.* 9, 2273–2285.
- [6]. Abourashed, E. A., and Khan, I. A (2001). High-performance liquid chromatography determination of hydrastine and berberine in dietary supplements containing goldenseal. *J. Pharm. Sci.* 90, 817–822. doi:10.1002/jps.1035
- [7]. Ahmed, R., Ali, Z., Wu, Y, Kulkarni, S., Avery, M., Choudhury, M, et al. (2011). Chemical characterization of a CommercialCommiphora wightiiResin sample and chemical profiling to assess for authenticity. *Planta Med.* 77, 945–950. doi:10.1055/s-0030-1250674
- [8]. VC. Manach, A. SC albert, C. Morand. Polyphenols: food sources and bioavailability. *Am. J. Clam Nutr.*, 2004, 79: 727-747.
- [9]. N. Venkatesan, B. S. Babu, S. P. Vyas. Protected particulate drug carriers for prolonged systemic circulation– a review. *Indian J. Pharm. Sci.*, 2000, 62: 327-333.
- [10]. M. A. Longer, H. S. Ching, J. R. Robinson. Oral delivery of chlorthiazide using a bioadhesive polymer. *J. Pharm. Sci.*, 1985, 74:406-411.
- [11]. S. Sharma, M. Sikarwar. Phytosome: a review. *Planta Indica*, 2005, 1: 1-3. A major pharma giant Indena S. P. A. Milan, Italy. Phytosomes technology, Available at www.indena.com.
- [12]. E. Bombardelli, S. B. Curri, R. Loggia Della, et al. Complexes between phospholipids and vegetal derivatives of biological interest. *Fitoterapia.* 1989, 60: 1-9.
- [13]. E. Bombardelli, A. Crostini, P. Morazzoni. Phytosomes in functional cosmetics. *Fitoterapia.* 1994, 95: 387-401.

- [14]. D. Dubey, S. Shrivastava, S. Kapoor, et al. Phytosome: a novel dosage structure, <http://www.pharmainfo.net/reviews/phytosome-novel-dosagestructure>, 2007.
- [15]. A. Gupta, M. S. Ashawal, S. Saraf. Phytosomes: a novel approach towards functional cosmetics. *J. Plant Science*, 2007, 644-649.
- [16]. Abo, K.A, Ogunleye, V.O & Ashidi, JS. Anti microbial potential of *Spondee mombin*, *Croton zambesicus* and *Zygotritoni crocea*. *Journal of Pharmacological Research*. 5 (13), 1991 pp 494-497.
- [17]. Adedapo, A.A, Shabi, O.O & Adedokun OA Anti helminthic efficacy of the queous extract of *Eu-phobia hirta* (Linn.) in Nigerian dogs. *Veterinary Archives*. 75 (1), 2005 pp 39-47.
- [18]. Adekunle, A.S. & Adekunle, O.C. Preliminary assess-ment of antimicrobial properties of aqueous extract of plants against infectious diseases. *Biology and Medicine*. 1 (3), 2009 pp 20-24.
- [19]. Bohlin L. *Natural Products Isolation, Drug Discovery Today*. 3 (12), 1998 pp 536-537. Bohlin, L. & Bruhn, J.G. *Bioassay methods in natural product research and drug development*. vol. 43, 1993 pp 288-356.
- [20]. Cowan, M.M. Plant products as antimicrobial agents. *Clinical Microbiology Reviews*. 12 (4), 1999 pp 564 – 582. Daffre, S, Bulet, P, Spisni, A, Ehret-sabatier, L, Rodriguez, EG. & Travassos, L.R. *Studies in Natural Products Chemistry*. Vol. 35. 2008, pp 597- 691.
- [21]. Doughari, J.H, Human, I.S, Bennade, S. & Ndakidemi, P.A. Phyto chemicals as chemotherapeutic agents and antioxidants: Possible solution to the control of antibiotic resistant verocytotoxin producing bacteria. *Journal of Medicinal Plants Research*. 3 (11), 2009 pp 839-848
- [22]. Fennell, C.W, Lindsey, K.L, McGaw, L.J, Sparg, S.G, Staf-ford, G.I, Elgorashi, E.E, Grace, O.M & van Staden, J. Assessing African medicinal plants for efficacy and safety. *Pharmacological screening and toxicology. Journal of Ethnopharmacology*. 1994 pp 205-217.