



SHORT COMMUNICATION

NOVEL STANDARDIZATION METHOD AND CHARACTERIZATION OF *AYAKANDHA CHENDURAM* : EFFICIENT HERBAL MEDICINE FOR ANEMIA

K. Rajamaheswari¹, V. Velpandian², M. Pitchiahkumar², K. Arunachalam² and R. Jothi Ramalingam^{3*}

¹Research Scholar, Department of Gunapadam, Government Siddha Medical College, Arumbakkam, Chennai-600 106, Tamil Nadu, India

²Post Graduate Department of Gunapadam, Government Siddha Medical College, Arumbakkam, Chennai-600 106, Tamil Nadu, India

³Department of Chemistry, Wolaita Sodo University, Sodo, Ethiopia

*E-mails: rjothiram@gmail.com, rajamaheswari.maheswari3@gmail.com
Tel.: +251945012126.

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Modern techniques such as XRD, SEM with EDAX, FTIR were used to generate physico-chemical fingerprint for Ayakandha Chenduram (AKC), one of the herbo-mineral siddha medicine prepared as per the siddha classical text by the process of calcination. AKC is used in the treatment of various disorders especially Anaemia. The present study showed that the metals in this preparation were in sulphide form which favours the therapeutic efficacy of the drug. Some particles in nano range were also identified.

Key words: Ayakandha chenduram, Herbo mineral drug, X-ray diffraction, Siddha medicine.

INTRODUCTION

Siddha system of medicine is always idiosyncratic due to the interpretation of metals and minerals in their preparations (Narayansami, 1975; Sharma, 1992; Shukla *et al* 2011). *Siddhars* are made from some revolutions in field of chemistry. Through process of *Suddhi* (purification) and *Maaranam* (trans-formation), the metals are becoming a biocompatible one. In the herbo-mineral preparations, the metals are becoming very potential (Galib *et al* 2011; Savarimuthu Michael *et al* 2011).

But nowadays, there is questions arised on the safety and efficacy behind these herbo-mineral preparations. The modern techniques are fingerprint for AKC physicochemical properties by analyzing its chemical as well as physical nature, existing in the final formulation. In present investigation, validation of the safety and efficacy of a Siddha herbo-mineral

preparation *Ayakandhaa chenduram* was done, which is indicated for anemia, by analyzing the physico-chemical properties. Though, this medicine has been traditionally used as a best drug for anaemia, till there is no scientific validation for this formulation. In present study, the evidences were established to ensure the safety profile and efficacy of AKC.

MATERIALS AND METHODS

The ingredients of AKC are iron - 100 g, magnetic oxide of iron - 100 g, cinnabar - 25 g, juice of *Karisalai (Eclipta prostrata)* as mentioned in *Yaakoobu Vaidhya Chinthamani-70*. In herbo-mineral preparations, metals are not in usual elemental form.

Purification

The iron ore is made into powder and lemon juice was added to it for consecutive 3 days. The