

## ***In-vitro* antifilarial screening of *Lawsonia inermis* extracts against experimental filarial infections**

**S. K. Lanjhiyana and Sweetly Lanjhiyana**  
Guru Ghasidas Viswavidyalaya, India

Lymphatic filariasis is considered endemic especially in tropical and subtropical regions of developing countries. More than 120 million populations around the world are infected whereas more than one billion people at risk of infection. Recommended combination therapies of broad-spectrum doses of either ivermectin with albendazole or albendazole with diethylcarbamazine are potential for microfilaricides only but having no effect on the adult macrofilariae. Hence, it is essential to develop and effective phyto-medicine based antifilarial drug having potential to kill or permanently sterilize the adult worm with comparatively no side effect on other hand. Dried chopped leaves of *Lawsonia inermis* (Family: Lythraceae) were subjected to soxhletion for methanolic (MLE) and aqueous (ALE) extracts. The bio-assay guided fractions of MLE & ALE obtained after column chromatography was subjected to in-vitro screening for worm motility and nerve muscle preparation assay against adult bovine filarial *S. digitata* parasite. After incubation for 24 and 48 h respectively at dose concentration of 0.01 to 1.0 mg/ml for possible dose response relationship thereby confirmed for irreversible-paralysis of both male and female worms was found to be significant ( $P < 0.05$ ) effect. Present study was focused to explore possible phyto-fractions based macrofilaricidal drug for treatment of human filariasis by using in-vitro and thereafter for in-vivo screening methodology.

## **Role of translational research in the development of translational herbal drug**

**Om Prakash**  
AVA Cholayil Health Care Pvt. Ltd., India

Translational medicine is a new concept developed in the past two decades. At present, translational medicine has become popular in USA, UK, and China. In my view, putting translational research to develop herbal drug should consider the uniqueness, problems and needs of Indian system of medicine. There has been a growing trend towards translational herbal drug for modern healthcare, as people throughout the world are becoming increasingly dissatisfied with the possible side-effects, lack of noticeable long-term results and high cost associated with allopathic drugs. Herbal products can provide a more natural and often more effective alternative by doing translational research to develop an efficacious herbal drug having origin from Indian system of medicine. Indian system of medicine has a unique well defined conceptual system and mainly reveals the uniqueness of the practice based medicine system. The advance model of Indian system of medicine is "from proven ethno-pharmacology to theory and then clinical practice". Experience accumulated from thousands of years' practice is a great treasure house. A lot of effective herbal medicines and therapeutic methods have been widely used in clinical practice. Because of these, the orientation, contents and mission of translational research in Indian system of medicine and western medicine are different. The strategy of translational research in Indian system of medicine should use modern technologies and methods to solve practical problems in clinical diagnosis, treatment and drug development of Indian system of medicine; and then establish related standards to leading the development of Indian system of medicine; finally Indian system of medicine can be used at a higher level, and a wider range in health services.

### **Biography**

Om Prakash has completed his Ph.D. at the age of about 30 years from Indian Pharmacopoeia Commission, Ghaziabad. He is the senior manager-NPD at R&D Center of AVA Cholayil Health Care Pvt. Ltd., Chennai. He has published more than 20 papers in reputed journals and scientific conferences and also worked as research scientist at R&D Center of The Himalaya Drug Company, Bangalore.