

Macrofilaricidal composition for the treatment of filariasis

- This is a novel macrofilaricidal composition for the treatment and prevention of filariasis caused by *Wuchereria bancrofti*, *Brugia malayi*, *Brugia timori*, *Loa Loa* and *Setaria digitata*.
- This technology relates to the synthesis of macrofilaricidal substituted naphthalenediones based upon the lead molecule obtained from the indigenous medicinal plant -Plumbago species.
- **Milestones achieved:**
 - **IP Status:** An Indian patent has been granted.
 - **Validation:**
 - a) Approximately a dozen of promising *in vitro* macrofilaricidal Substituted Naphthoquinones were tested and most of these molecules showed favourable *in vitro* ADME properties.
 - b) The *in vivo* screening in animal model is under process.
 - **USP of technology:**
 - a. This composition is far superior in activity and more effective than the lead molecule Plumbagin.
 - b. This composition is effective in killing the adult filarial worm.
- Technology was developed at Vector Control Research Centre, Pondicherry.
- ICMR is seeking potential agencies for the up-scaling of technology.