









- [2] Veerakumari, L. (1996). In vitro studies on the effect of some anthelmintics on *Cotylophoroncotylophorum* (Fischoeder, 1901) (Digenea: Paramphistomidae). A structural and biochemical analysis. Ph.D. thesis, University of Madras. Chennai
- [3] Radwan, N.A., Khalil, A.I. and Wahdan, A.E, (2012). *In vitro* evaluation of anthelmintic activity of *Allium sativum* against adult *Cotylophoron cotylophorum* (Paramphistomidae), Personal noncommercial use only, *PUJ*, 5(2): 135- 146.
- [4] Prichard, R., 1994. Anthelmintic resistance. *Vet.Parasitol.*, 54:259-268.
- [5] Mwamachi, D.M., J.O. Audho, W. Thorpe and R.L. Baker, 1995. Evidence for multiple anthelmintic resistances in sheep and goats reared under the same management in coastal Kenya. *Vet.Parasitol.*, 60: 303-313.
- [6] Waller, P.J., 1997. Anthelmintic resistance. *Vet.Parasitol.*, 72:391-405.
- [7] Hammond, J.A., D. Fielding and S.C. Bishop, 1997. Prospects for Plant anthelmintics in tropical veterinary medicine. *Vet. Res. Comm.*, 21 : 213-228
- [8] Kusiluka, L. and D. Kambarage, 1996. Common Diseases of sheep and Goats in Sub- Saharan Africa: Diseases of small Ruminants. A Handbook. 1<sup>st</sup> Edn, Center for Tropical Veterinary Medicine, Scotland.
- [9] Coles, G.C. and R.T. Roush, 1992. Slowing the spread of anthelmintic resistant nematodes of sheep and goats in the United Kingdom. *Vet. Res.*, 130: 505-510.
- [10] Chaturvedi, M., Dwivedi, S., Dwivedi, A., Barpete, P.K. and Sachan, R, 2009. Formulation and evaluation of polyherbal anthelmintic preparation. *Ethnobotanical Leaflets*, 13: 329 – 331.
- [11] Krueger, R., Dover, E.K., McSorley, R., Wang, K-H. (2009) Marigold (*Tagetes* spp) for nematode management. University of Florida IFAS Extension, *Publication ENY-056*.
- [12] Abdel-Ghaffar, F., Semmler, M., Al-Rasheid, K. A., Strassen, B., Fischer, K., Aksu, G., and Mehlhorn, H. (2011). The effects of different plant extracts on intestinal cestodes and on trematodes. *Parasitology research*, 108(4), 979-984.
- [13] Datsu Kalip, R., SlyrandaBaltini, A., Wycliff, A., Abdulrahman, F.I. (2011) Preliminary phytochemical screening and in vitro anthelmintic effects of aqueous extracts of *Salvadorapersica* and *Terminaliaavicenoides* against *ststrongylinenema*-todes of small ruminants in Nigeria. *Journal of Animal and VeterinaryAdvances*. 10(4):437-442
- [14] Singh, T. P., & Singh, O. M. (2011). Phytochemical and pharmacological profile of *Zanthoxylumarmatum* DC- An overview. *Indian Journal of natural products and resources*, 2(3), 275-285.
- [15] Lakshmi, B. S., & Naidu, K. C. (2010). Comparative Morphoanatomy of *Piper betle* L. cultivars in India. *Annals of Biological Research*, 1(2), 128-134.
- [16] Baslas, R.K.; Baslas, K.K. Chemistry of Indian essential oils - Part VIII. Flavour Ind. (1970), 1473-474; [Chem. Abstr. 1971, 74, 34538z].
- [17] Rastogi, R.P.; Mehrotra, B.N.(1993)*Compendium of Indian Medicinal Plants*, Vol. 3; Publications and Information Directorate: New Delhi.; pp. 502-503
- [18] Parmer, V S., Jain, S.C., Gupta, S., Talwar, S., Rajawanshi, V.K., Kumar, R., et al. (1998) Polyphenols and alkaloids from *Piperspecies*. *Phytochemistry*, 49, 1069-1078.
- [19] Kumar, D., Chandra, S and Tripathi, H.C., 1995. In vitro motility recording of *Fasciolagigantica*. *J.Vet.Parasitology.*, 9:31-36.
- [20] Barragry, T. (1984). Anthelmintics – A review: Part II. *N.Z.Vet.J.*, 32:191-199.
- [21] Jenkins, D. C. & T. S. Carrington. 1982. An *in vitro* screen for anthelmintics employing worms *Nippostrongylusbrasiliensis* in a defined medium. *Veterinary Parasitology* 11: 223-230.
- [22] Kumar, D. and Tripathi, H.C. (1998). Paralytic effect of fasciolicidal agents on rhythmic motility of *Fasciolagigantica*. *Indian Journal of Animal Sciences*, 68:1126-1129.
- [23] Veerakumari L and Priya P (2006). In vitro effect of Azadirachtin on the motility and Acetylcholinesterase activity of *Cotylophoron cotylophorum* (Fischoeder, 1901). *Journal of Veterinary Parasitological*, 20: 1-5.
- [24] ManojDhanraj and Veerakumari. (2014). In vitro effect of *syzygiumaromaticum* on the motility and Acetylcholinesterase of *Cotylophoron cotylophorum*. *Ind. J. Vet. & Anim. Sci. Res.*, 43 (3) 187 - 194., May - June 2014
- [25] L.Veerakumari, and Munuswamy, N., 1999. In vitro studies on the effects of some anthelmintics on *Cotylophoron cotylophorum* (Digenea, Paramphistomidae): a structural analysis. *Cytobios* 98: 39-57.
- [26] Harborne JB, (1998). *Phytochemical methods*. In a guide to modern techniques of plant analysis 3rd ed., pp: 40-137
- [27] Veerakumari, L. (2003). Micromotility meter: an instrument to evaluate the efficacy of anthelmintic drugs. In: “*Proceedings of Fourteenth National Congress of Indian Association for the Advancement of Veterinary Parasitology*” 1998 Oct. (Maske. D. K., Kolte, S. W., Banubakode, S.B. and Kurkure, N.V.eds.), Nagpur, India, pp.152.
- [28] Ellman, G.L., Courtney, K.D., Andrews, V. and Featherstone, R.M. (1961). A new and rapid colorimetric determination of acetylcholinesterase activity. *Biochemical Pharmacology*, 1:88-95.
- [29] Lowry, O.H., Rosebrough, N.J., Farr, A.L. and Randall, R.J. (1951). Protein measurements with folin phenol reagent. *Journal of Biology and Chemistry*, 193:265-275.
- [30] Maule, A.G., Mousley, A., Marks, N.J., Day, T.A., Thompson, D.P., Geary, T.G. and Halton, D.W. (2002). Neuropeptide Signaling Systems - Potential Drug Targets for Parasite and Pest Control. *Current Topics in Medicinal Chemistry*, 2(7): 733-758.
- [31] Opperman, C. and Chang, S. (1992). Nematode acetylcholinesterase: Molecular forms and their potential role in nematode behavior. *Parasitology Today*, 8:406-410.
- [32] Lee, D.L. (1996). Why do some nematode parasites of the alimentary tract secrete acetylcholinesterase? *International Journal of Parasitology*, 26:499-508.
- [33] Camacho, M., and Agnew, A. (1995). Schistosoma: rate of glucose import is altered by acetylcholine interaction

- with tegumental acetylcholine receptors and acetylcholinesterase. *Exp. Parasitol.* 81, 584–591. doi: 10.1006/expr.1995.1152.
- [34]Maule A G, Halton D W, Shaw C and Johnston, C F.(1993) The cholinergic, serotonergic and peptidergic components of the nervous system of *Monieziaexpensa*(Cestoda, *Cyclophyllidae*); *Parasitology* 106 429-440
- [35]Pal, P., and Tandon, V. (1998). Anthelmintic efficacy of *Flemingia vestita* (Fabaceae): genistein-induced alterations in the esterase activity in the cestode, *Raillietina echinobothrida*. *Journal of biosciences*, 23(1), 25-31.Chicago
- [36]Satish B. Kosalge et al. (2009) Investigation of anthelmintic potential of some plants claimed by tribals of satpuda hills. *Int.J. PharmTech Res.*,1(1)
- [37]G. Hrczkova and S. Velebny, (2013) Pharmacological Potential of Selected Natural Compounds in the Control of Parasitic Diseases, *Springer Briefs in Pharmaceutical Science & Drug Development*, DOI: 10.1007/9 78-3-7091-1325-7\_2.
- [38]Sondhi, S.M., Shahu, R., MaganArchana, (1994), *Indian Drugs*, 31(7), 317-320.
- [39]Ponnulakshmi, R. and Ezhilarasi, B.S, (2013). Efficacy of bulb extracts of *Allium cepa* varieties (red, white and small onion): An in vitro antifungal and antioxidant activity, *Int. J. Pharm. Bio. Sci.*, 4(4): 692 – 713.
- [40]Keiser, J., Tritten, L., Adelfio, R., & Vargas, M. (2012). Effect of combinations of marketed human anthelmintic drugs against *Trichuris muris* in vitro and in vivo. *Parasites & Vectors*, 5, 292. doi:10.1186/1756-3305-5-292.

## Author Profile



**Mrs. Jeya.S** is a life member of The Indian Science Congress Association and working as Assistant Professor in the Department of Adv. Zoology and Biotechnology in Meenakshi College for women (Autonomous) Chennai 24. She has fifteen years of experience in teaching; currently she is doing Ph.D. (Part-time) in the field of veterinary Parasitology under the able guidance of Dr.L.Veerakumari.



**Dr. (Mrs)L. Veerakumari**, Associate Professor & Head, PG & Research Department of Zoology, Pachaiyappa's College, Chennai, Tamil Nadu ,India has thirty five years of teaching and research experience. She has received her PhD degree from University of Madras, India in 1997. She is a life member of Indian Association for the Advancement of Veterinary Parasitology, Indian society of Parasitology, Indian Association of Biomedical Scientists, Indian Association of physiologists and pharmacologists, Indian Society of education and environment, Indian Association of Science and technology and Indian Science Congress Association. She has authored two books and has published many research papers. She has completed six research projects funded by UGC, DST and TNSCST. She is a Gold medalist and received many best paper awards, MABMS and FABMS Title, Best researcher award , Bharat Jothi award, Ismail oration award and Inducted into the American order of Scientific and technical merit.