



## Effect of Medicinal Plants on *Fasciola gigantica* in Cattles

Zhao Lin\*

Department of Veterinary Sciences, Central South University, Yuelu District, Changsha, China

### DESCRIPTION

*Fasciola gigantica* is commonly known as giant liver fluke and tropical liver fluke. *Fasciola gigantica* is a parasitic flatworm belonging to the trematode. Tropical liver flukes are very harmful to their hosts. It is one of the most abundant and damaging helminth parasites of grazing ruminants. The primary hosts are sheep, goats, buffaloes, donkeys and other domestic and wild mammals. *Fasciola gigantica* are usually occurring in the biliary ducts in the liver and the gallbladder. Adult liver flukes are the flat body and oval shaped, more elongated than *Fasciola hepatica*. They can reach up to 7.5 cm length. They are pink-greyish to dark red in color.

Liver flukes have two suckers, both on the ventral side. The body surface is covered with numerous spines. The mouth ends in the pharynx, a muscular tube that allows sucking. The digestive system is blind, without an anus the only opening is the mouth and not linear, as seen in most animals, but branched, ending in several blind ducts. Liver fluke are simultaneous hermaphrodites, i.e. they have both male and female reproductive organs. Amongst the livestock in India, buffaloes are of great economic importance as they are closely associated with the life activities of the resource poor rural farmer. They make a critical contribution to food self-sufficiency for households by providing milk, meat, skin, manure, and traction. They usually graze in the open natural external environment, face regular natural calamities such as drought or flood and as such are very susceptible to many diseases. As a result, the economic benefits remain marginal due to prevailing diseases, poor nutrition, poor animal health and general lack of veterinary care.

Effective control of this parasite includes the strategic use of anthelmintic drugs. However, problems have emerged with the use of chemical drugs, notably the development of resistance in the parasite, chemical residues and toxicity problem as well as the cost of drugs for treatment in cattle. Mostly, farmers depend on centuries-old ethnobotanical knowledge of the treatments of parasitic infections. The synthetic anthelmintic drug is commonly used against liver flukes. Some of these chemotherapeutic agents are effective against immature flukes and others are effective on mature stage and few are lethal on both stages of flukes. Various veterinary drugs have been used to eliminate parasites from buffaloes. The most commonly used *in vivo* anthelmintic drugs against *Fasciola* are oxcylozanide, triclabendazole, albendazole and niclosamide. These drugs are unaffordable and inaccessible for poor cattle farmers. In addition the problem of potential residue of drugs in milk, meat and other animal products, which will harmful for the people consuming these substances thus, there is an urgent need for alternate parasitic control strategies to overcome the drawback associated with the use of synthetic drugs and develop a new, eco-friendly drug to control *Fasciola gigantica* infection. This applies to plant-based anthelmintics that have been used to eliminate and expel worms from the gastrointestinal tracts. Plants have been used from ancient times to cure diseases of man and animals. Plants are the natural and the traditional source of the drug. In Pakistan 41 species of plants are reported for their traditional use as anthelmintic. Various traditional and ethnobotanical knowledge of rural and indigenous people are tested scientifically and found the results positive. In Mozambican studies are on-going of the effects of plants on gastrointestinal nematodes.

**Correspondence to:** Zhao Lin. Department of Veterinary Sciences, Central South University, Changsha, China, E-mail: dominic123@gmail.com

**Received:** 01-Feb-2023, Manuscript no: JTD-23-19664, **Editorial assigned:** 06-Feb-2023, PreQC no: JTD-23-19664 (PQ), **Reviewed:** 21-Feb-2023, QC no: JTD-23-19664, **Revised:** 28-Feb-2023, Manuscript no: JTD-23-19664 (R), **Published:** 07-Mar-2023, DOI: 10.35241/2329-891X.23.11.368

**Citation:** Lin Z (2023) Effect of Medicinal Plants on *Fasciola gigantica* in Cattles. J Trop Dis. 11:368.

**Copyright:** © 2023 Lin Z. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.