

ICMR looks for partners to commercialise herbal composition to treat filariasis

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Indian Council of Medical Research (ICMR) has started scouting for partners to commercialise a novel herbal composition for treatment and prevention of filariasis and an immunodiagnostic reagent for detection of plasmodium vivax in patient's blood.

Both the products had been developed by the institutes under the ICMR and were now up for grabs by the industry for commercialisation and further research, sources said. Studies were carried out to identify a lead for the development of potent macrofilaricidal from *Trachyspermum ammi* (Apiaceae family).

“It is an erect branched annual plant up to 90 cm tall, cultivated almost throughout India. A fruit extract of *T. ammi* containing monoterpene derivatives has shown effective macrofilaricidal activity both in vivo and in vitro for which toxicological studies are going on. An Indian patent has been filed. The compositions would be effective against short-term as well as long-term treatment and/or prevention of filariasis caused by *Wucheria bancrofti*, *Brugia malayi*, *Loa loa* and *Setaria digitata*,” sources said.

Filariasis is a vector borne parasitic disease affecting millions of individuals and is the second leading cause of permanent and long-term disability in the world causing illness ranging from lymphatic inflammation and elephantiasis to skin disease and blindness.

The diagnostic reagent, the second product, is based on immunodiagnostic antibody probe for detection of *P. vivax* antigen. “Hybridoma cell line has been established for the production of monoclonal antibodies specific to *Plasmodium vivax*. Monoclonal antibody herein obtained, can be employed for the purpose of immunodiagnostic as an antibody probe for the detection of *P. vivax* antigen in malaria patient's blood,” according to the official sources.

“This antigen is non-secretory type, since the monoclonal antibody did not react with plasma. The monoclonal antibody did not show any cross-reactivity with *P. falciparum* when tested by ELISA and on a western blot, establishing high specificity towards non-secretory antigens of *P. vivax*. An Indian patent has been filed,” sources added.

The parasite *P. vivax* is the most frequent and widely distributed cause of malaria. It is one of the four species of parasite, which commonly causes malaria infection in human. *P. vivax* can reproduce both asexually and sexually, depending on its life cycle stage.