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WORLD HEALTH ORGANIZATION

Collaborating Centre for Research & Training in Lymphatic Filariasis
and Integrated Vector Management

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Indian Council of Medical Research, New Delhi

PATENTS GRANTED

1. Nisha Mathew, Kalyanasundaram M & Balaraman K. Novel macrofilaricidal composition and process for preparing the same. Indian Patent No. 280638 (2017).
2. Nisha Mathew, Kalyanasundaram M & Balaraman K. Macrofilaricidal activity of monoterpene derivatives having phenolic characteristics from the fruit extract of *Trachyspermum ammi* against filariasis. Indian Patent No. 274393 (2016).
3. Balaraman K, Geetha I, Paily KP, Manonmani AM & Prabakaran G. A cyclic lipopeptide of *Bacillus subtilis* subsp. *subtilis* with potential to kill mosquito stages. Indian Patent No. 264599 (2015).
4. Hoti SL & Vasuki V. A process for the diagnosis of infective (L3) stage larvae of *Wuchereria bancrofti* in vector mosquito *Culex quinquefasciatus*. Indian Patent No. 257150 (2013).
5. Poopathi S. Biocidal composition and preparation thereof. Indian Patent No. 255023 (2013).
6. Balaraman K, Hoti SL & Manonmani AM. A mosquito larvicidal preparation of *Bacillus thuringiensis* var. *israelensis*. Indian Patent No. 222246 (2008).

7. Balaraman K, Geetha I, Padmanabhan V & Paily KP. A process for the production of mosquito oviposition attractant. Indian Patent No. 199635 (2006).
8. Balaraman K, Geetha I, Prabakaran G, Padmanabhan V & Paily KP. A process for the production of mosquitocidal compound. Indian Patent No.192872 (2006).
9. Nisha Mathew & Kalyanasundaram M. A technology for the production of controlled release formulation of an insect growth regulator for mosquito larval control. Indian Patent No. 191820 (2005).
10. Balaraman K & Nisha Mathew. Process for the preparation of Cyclosporin-A from *Tolypocladium* species. US patent No. 5,656,459 (1997); Brazilian Patent BR9601017 (1997); European Patent EP-96-356060/36 (1996); Indian Patent No. 183940 (2000); DE69521193T (2001); Canadian Patent CA-2142240 C (2002).
11. Balaraman K & Kuppuswamy M. A process for the production of THROMBINASE, a blood clot dissolving enzyme from *Bacillus* sp. US Patent No. 5434059 (1995); European Patent No. 0624642 (1999).

PATENT APPLICATIONS FILED

1. Paramasivan R. Novel Ovitrap for Aedes control. Indian Patent No. 202011018709/ 2020.
2. Muniyaraj M. Device for generating Germ free and Gnotobiotic mosquitoes. Indian Patent No. 201911049(989)/2019.
3. Hoti SL, Senthil Kumar A, Vasuki V, Mayuri P, Balasubramaniyan R & Nikhil C. A process for the Electrochemical Detection of Lymphatic Filarial Infection in Vector Mosquitoes”. Indian Patent Application No. 201911039806/2019.
4. Manonmani AM, Geetha I & Balaraman K. Improved process for the production of Cyclosporin-A using the fungus *Tolypocladium* sp. strain NRRL No: 18950. Indian Patent Application No. 699/DEL/2013; Canadian Patent Application No. CA 2901025A1/2018; US Patent Application No. US20160017003 A1/2016.
5. Hoti SL, Balaraman K & Prabakaran G. A Process for the preparation of a fibrinolytic enzyme. Indian Patent Application No 30/DEL/2014.
6. Hoti SL & Prabakaran G. A Process for the preparation of an Eco-friendly dehairing protease enzyme from *Bacillus* sp. for leather processing. Indian Patent Application No: 2654/DEL/2012.

PATENT APPLICATIONS SENT TO ICMR IN 2020

1. Prabakaran G, Ashwani Kumar & Mathivanan A. A novel process for the production of a mosquito larvicidal formulation based on Solid State Fermentation (SSF) of *Bacillus thuringiensis* var. *israelensis* (serotype H14) (2020).
2. Paramasivan R. Portable Protein Gel Electrophoresis unit (2020).
3. Paramasivan R. Paramasivan-VCRC Trap (2020).
4. Manikandan S, Poopathi S & Britto RJD. Invention of a cost-effective mosquito attractant and lethal non-electric ovitrap (2020).
5. Anns Tom & Poopathi S. Isolation of a novel bacterial strain (*Bacillus thuringiensis israelensis* strain VCRC 642) with dual function of potent mosquitocidal activity and biofilm forming capacity (2020).
6. Bhuvaneshwari B & Poopathi S. Isolation of a novel mosquitocidal bacterium *Bacillus thuringiensis* serovar *israelensis* VCRC-638 from marine oil spill over soil (2020).
7. Manikandan S & Poopathi S. Isolation of a novel mosquitocidal bacterium *Bacillus cereus* VCRC-641 from fresh water fish *Clarias batrachus* (2020).
8. Paramasivan R. SMARTMASK- a safe, robust, cost effective and rapid detection system for SARS CoV-2 (2020).
9. Paramasivan R. CORONA FREE JACKET - Personal Protection 24x7 (2020).



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