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Journal of Malaria Chemotherapy, Control & Elimination

Dr. Delenasaw Yewhalaw
Editor-in-Chief

Associate Professor
Ph.D., Jimma University
Ethiopia

Editor's Biography

- Delenasaw Yewhalaw joined Asmara University, Eritrea in 1981 and graduated in Biology in 1985. He taught Biology for over 8 years in Ethiopian High Schools. In 2002, he joined the graduate program at the Faculty of Natural sciences at Addis Ababa University, Ethiopia and obtained Masters of Science Degree in Entomology. From 2004 to 2009, he worked at the Department of Biology, Faculty of Natural Sciences, Jimma University, Ethiopia at various capacities (Lecturer to Assistant Professor). From 2007 to 2009, he served Jimma University as Director of Continuing and Distance Education (CDE), and from 2011 to present as a Director of the Tropical and Infectious Diseases Research Center (TIDRC). In 2012 he obtained his PhD in Medical Sciences from Université Catholiqué de Louvain, Brussels, Belgium. Currently, He is an Associate Professor of Medical Entomology at the College of Public Health and Medical Sciences, Jimma University, Ethiopia and a member of the Editorial Boards for Annals of Tropical Medicine and Public Health, American Journal of Health Research, Ethiopian Journal of Health Sciences and Journal of Education and Sciences. Reviewer for Malaria Reports, Parasites & Vectors, PLoS ONE, Journal of Tropical Diseases, Ethno biology and Ethno medicine, and Malaria Journal. He is also an Executive Board Member of the Ethiopian Society of Tropical & Infectious Diseases (ESTAIDS).

Research Interest

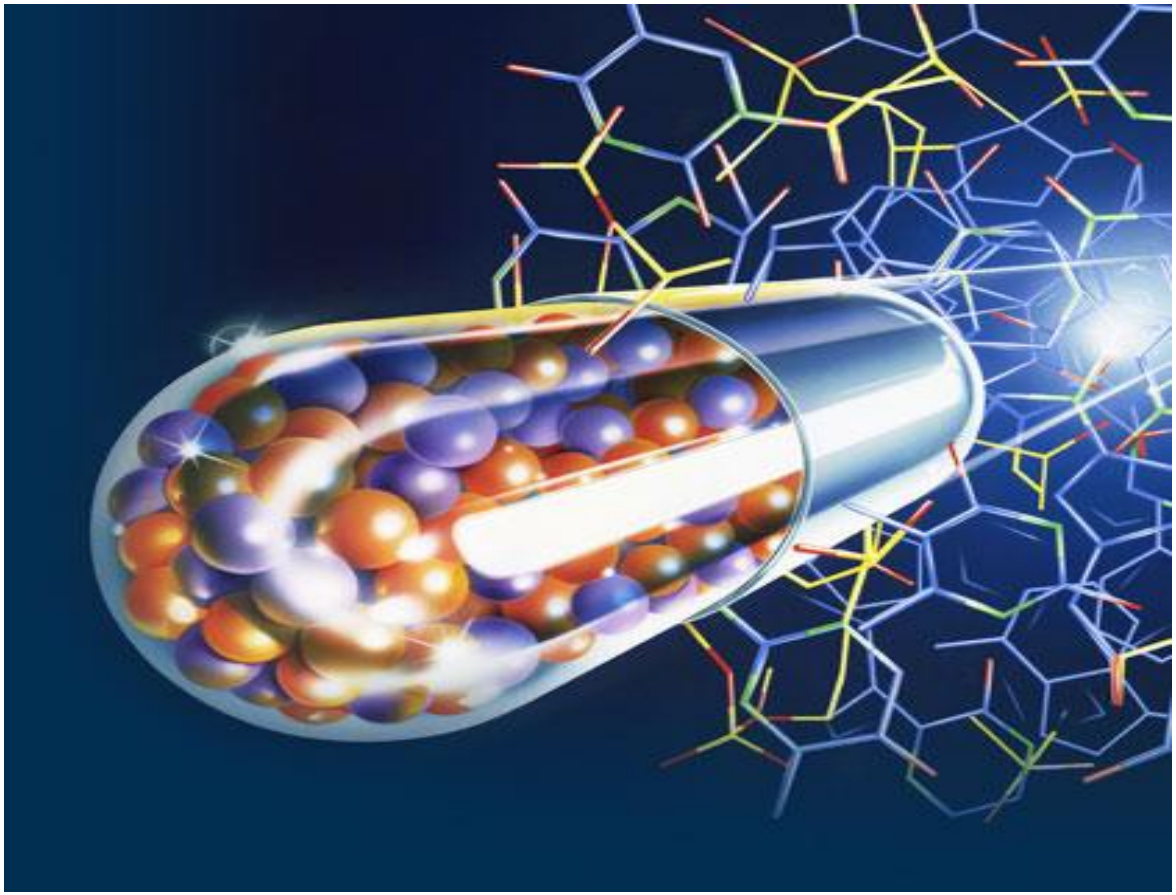
- Insecticide resistance
- Vector biology and control
- Malaria epidemiology and Assessment of malaria risk
- Vector Surveillance and Monitoring
- Climate Change and Vector Borne Diseases
- Health Impact Assessment

Publications

- Delenasaw Yewhalaw , Hamels S, Getachew Y, Torgerson PR, Anagnostou M, Legesse W, Kloos H, Duchateau L, Speybroeck N. (2014). Water Resources Developments in Ethiopia: Benefits and Negative Impacts on the Environment, Vector-Borne Diseases and Food Security. Environmental Reviews doi: 10.1139/er-2013-0076
- Delenasaw Yewhalaw, Fantahun Wassie, Walter Steurbaut, Pieter Spanoghe, Wim Van Bortel, Leen Denis, Dejene Ayele, Yehenew Getachew, Marc Coosemans, Luc Duchateau, Niko Speybroeck (2011). Multiple insecticide resistance: an impediment to insecticide-based malaria vector control program PLoS ONE 6 (1) e16066: doi: 10. 1371/journal.pone.0016066
- Delenasaw Yewhalaw, Wim Van Bortel, Leen Denis, Marc Coosemans, Luc Duchateau and Niko Speybroeck (2010). First evidence of high knockdown resistance frequency in Anopheles arabiensis (Diptera: Culicidae) from Ethiopia. American Journal of Tropical Medicine and Hygiene 83(1): 122-125
- Delenasaw Yewhalaw, Wondwossen Kassahun, Kifle Woldemichael, Kora Tushune, Morankar Sudhakar, Daniel Kaba, Luc Duchateau, Wim Van Bortel and Niko Speybroeck (2010). The influence of the Gilgel-Gibe hydroelectric dam in Ethiopia on caregivers' knowledge, perceptions and health seeking behavior towards childhood malaria. Malaria Journal 9:47

- Delenasaw Yewhalaw, Yehenew Getachew, Kora Tushune, Kifle W/Michael, Wondwossen Kassahun, Luc Duchateau, Niko Speybroeck (2013). The Apparent Effects of Dams and Season on Malaria Incidence and Anopheles Abundance in Ethiopia. BMC Infectious Diseases 13: 161 doi: 10.1186/1471-2334-13-161, (Highly accessed)
- Delenasaw Yewhalaw, Asale A, Tushune K, Getachew Y, Duchateau L, Speybroeck N (2012). Bio-efficacy of selected long-lasting insecticidal nets against pyrethroid resistant Anopheles arabiensis from south-western Ethiopia. Parasites & Vectors 5 (1):159 (Highly accessed)
- Delenasaw Yewhalaw, Asale A, Getachew Y, Duchateau L, Speybroeck N (2013). Growing Insecticide Resistance and Outdoor Transmission: Potential Roadblocks for Growing Malaria Control Efforts in Ethiopia. Pathogens and Global Health 107 (8): 437
- Mereta ST, Delenasaw Yewhalaw, Boets P, Ahmed A, Duchateau L, Speybroeck N, De Meester L, Goethals PLM (2013). Physico-chemical and biological characterization anopheline larval habitats (Diptera: Culicidae): Implications for malaria control strategies. Parasites & Vectors 6: 320 (Highly accessed)
- Delenasaw Yewhalaw, Legesse, W, Van Bortel W, G/Selassie S, Kloos H, Duchateau L, Speybroeck N (2009). Malaria and water resource development: the case of Gilgel-Gibe hydroelectric dam in Ethiopia. Malaria Journal 8:21 (Highly accessed)
- Getachew Y, Janssen P, D elenasaw Yewhalaw, Spebroeck N, Duchateau L (2013). Coping with time and space in modeling malaria incidence: a comparison of survival and count regression model. Statistics in Medicine Doi:10.1002/sim.5752
- Getachew M, Delenasaw Yewhalaw, Tafess K, Getachew Y, Zeinedin A (2012). Anaemia and associated risk factors among pregnant women in Gilgel-Gibe dam area, Southwest Ethiopia. Parasites & Vectors 5: 296
- Zemene E, Delenasaw Yewhalaw , Abera S, Belay T, Samuel A, Zeynudin A. (2012). Seroprevalence of Toxoplasma gondii and associated risk factors among pregnant women in Jimma Town, Southwest Ethiopia. BMC Infectious Diseases.12:337

Drug Resistance- Malaria



INTRODUCTION

- The prevalence of resistance to known anti-malarial drugs has resulted in the expansion of anti-malarial drug discovery efforts.
- Several new anti-malarial agents are undergoing clinical trials, mainly those resurrected from previous anti-malarial drug discovery programs.

A DEADLY CYCLE

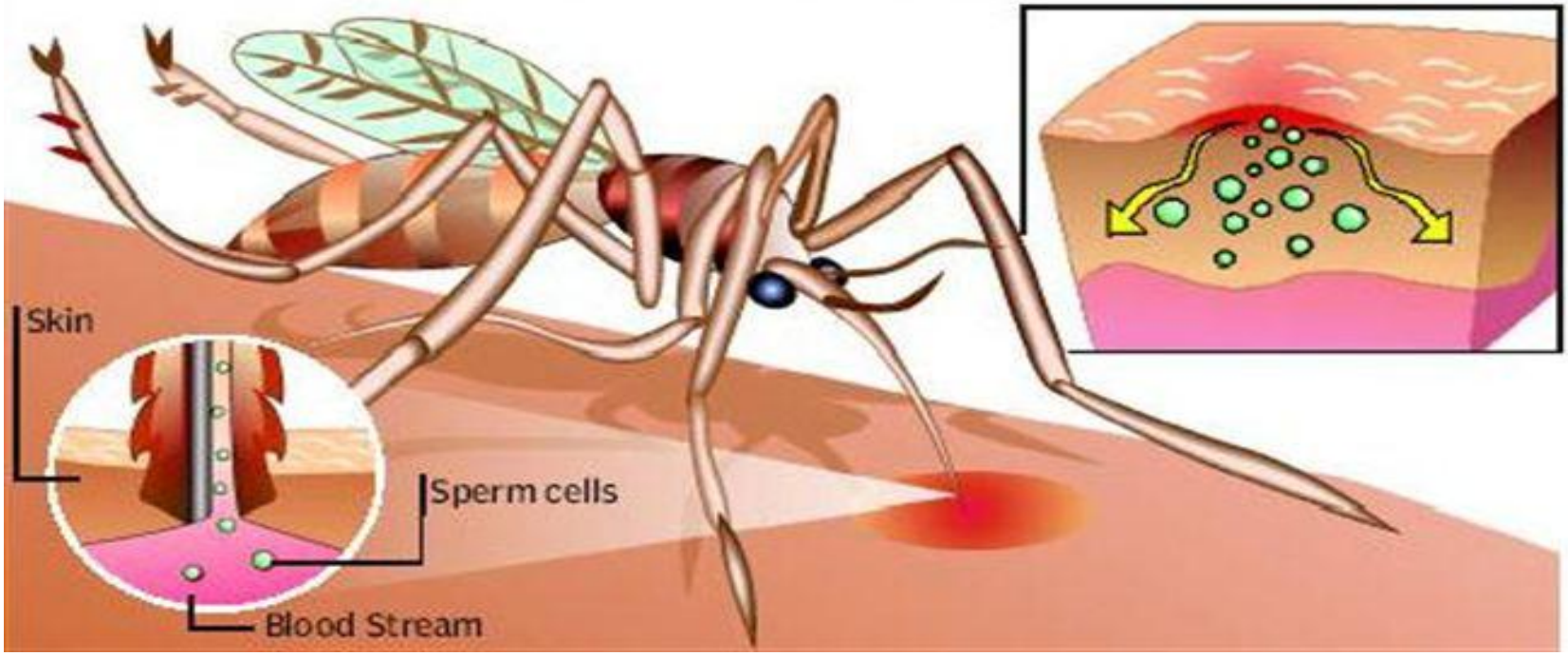
Malaria is caused by a parasite called Plasmodium transmitted via mosquitoes

1 The malarial sperm cell fertilises an egg cell in the gut of a mosquito. A parasite sporozite is born. The mosquito passes sporozites via its saliva into the human victim

2 Once in the victim's blood stream, the sporozites penetrate liver cells and start reproducing. The sporozites multiply until the liver cells begin to rupture

3 Newly formed sporozites re-enter the blood stream and attach themselves to blood cells. Infected red blood cells burst, infecting other blood cells

4 This cycle depletes the body of oxygen and causes fever and chills. A dormant version of the parasite travels through the host's blood stream to be ingested by another mosquito to carry it to a new host



Drug Resistance

Mechanisms

- mutations in target gene
- ↑ production of target
- ↓ drug accumulation (includes ↑ efflux)
- drug inactivation

Spread

- self treatment
- poor compliance
- mass administration
- long drug half-life

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