“There will be epidemics...”

EBOLA: WORLD GOES ON RED ALERT

Spread of Spanish Flu Menaces War Production

Six Dead, 17 Sick From Drug-Resistant TB

Panic as 1,500 Die of Malaria

Brace for Dengue

Ebola Out of Control

Death Toll Growing as Influenza Claims Many Scores Victims

FDA Busts Fake Malaria Medicines

New Hope for AIDS Drug

Dengue Dengue EVERYWHERE

African Countries to Plot New Malaria Vaccine

ZIKA THREAT ON OUR DOORSTEP

Six Dead, 17 Sick From Drug-Resistant TB

WHO Declares State of Emergency Over Zika Virus, Dengue Fever Outbreak

ZIKA THREAT ON OUR DOORSTEP

Beaten to an Ebola-affected country?
Stay away from ASTMH meeting, Louisiana says

Charity to Help Fight Malaria in Africa

Officials: Texas Sees Growing Number of Typhus Cases

FDA Busts Fake Malaria Medicines

DIPHTHERIA: Why Is It Back?

Malaria Cases on the Rise in Last 3 Years

ASTMH Annual Meeting Canceled Due to Spanish Flu Outbreak

Quarantine WANTED as Yellow Fever Spreads

An American Plague: Yellow Fever Epidemic of 1793

Brace for Dengue

Cholera Epidemic in Yemen Now Affects One Million People

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MOON PHASE EFFECT ON MOSQUITO VECTORS OF WEST NILE VIRUS IN MADAGASCAR: BIODIVERSITY, ABUNDANCE, HOST ATTRACTIVENESS AND FEEDING RATES

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West Nile Virus (WNV) infection occurs throughout Madagascar. Its epidemiological cycle involves horses, human, birds and mosquitoes. Our entomological data shows unexpected information on mosquitoes vectors diversity and biology that relates to the collection methods. This study highlights the effect of lunar cycle that has not been previously considered in previous studies in Madagascar. During 2017, the influence of the two lunar phases (full versus new moon) on mosquito populations was analyzed in a farm located in the surroundings of Antananarivo city, Madagascar. Each month, mosquito collections were performed twice: one night during the full moon and one during the new moon. Six light traps were used: three indoors (in horse’s box stall, in a house, in a cowshed), while three outdoors (near a pigsty, near a chicken coop, near a water point). During 24 night catches, 36,448 specimens belonging to 23 species were collected with Culex antennatus (64%) and Cx. quinquefasciatus (30%) the most abundant species. Cx. antennatus was mostly collected in traps associated with domestic animals while Cx. quinquefasciatus in trap placed in house. Each month, the total number of females caught during new moon was 1 to 3.5 times higher than those caught during full moon (ANOVA; F=3.44, DF=3, P<0.05). Larger numbers of mosquitoes, driven mainly by Cx. antennatus, were collected during the new moon in the three outdoor traps; and inversely during the full moon in the cowshed. This new moon effect was observed in the house but driven mainly by Cx. quinquefasciatus. Lunar phase did not influence the abundance of mosquitoes in horse’s box stall and the variation of mosquitos’ diversity. The total number of fed and unfed females followed (F=0.709, DF=39, P>0.05) the same pattern than the abundance of mosquitoes collected in the farm. The lunar cycle has an effect on mosquito abundance and host attractiveness and might vary according to the mosquito species. This lunar effect and the location of traps should be taken into consideration for one target species during entomological investigations aiming at unraveling West-Nile virus transmission when using light traps.

RELATIONSHIP BETWEEN MICROCLIMATE AND ENVIRONMENTAL VARIABLES AND MOSQUITO ABUNDANCE IN RURAL ECUADOR

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Mosquito abundance is an important predictor of mosquito-borne illnesses, such as dengue fever. Aedes aegypti mosquitoes, which spread the dengue virus, have a close relationship with humans, often living only within urban environments. Fine-scale relationships between climate, environment, and mosquito populations in this setting are poorly understood. Using mosquito traps fitted with microclimate sensors, we...