Anopheles deaneorum: a new potential malaria vector in State of Santa Catarina, Brazil (Diptera: Culicidae)

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Dear Editor,

Although the vast majority of malaria cases in Brazil occur at Amazonian region, imported and autochthonous cases also occur at the State of Santa Catarina[1]. The healthcare professionals of this state are probably not prepared to diagnose and treat malarial cases[2], and this could even be life-threatening[3].

Even after the malaria control program, several Anopheles species are being reported for the state[4], and Anopheles cruzii, well adapted to primary and secondary forests, is the greatest potential vector. The previous report of Anopheles deaneorum at eight municipalities of Santa Catarina[4] has a great significance, but was poorly detailed and probably has not received enough attention though. Mosquitoes belonging to this species, of Anopheles albitaris complex, are highly anthropophilic[5] and as susceptible to experimental infection with Plasmodium vivax[6] and Plasmodium falciparum[7] as Anopheles darlingi, being found naturally infected with both Plasmodium species at the State of Rondônia, Brazil[8].

At October 8th, 2012, a gathering was performed in the twilight near the headquarters of the Parque Estadual da Restinga (Southern Brazilian Coastal Sandy Vegetation) areas are widely distributed along the coastal area of the state, there is greater potential for the contact of human populations with the mosquitoes in those areas than at forest areas, and the plentiful presence of this potential vector represents a great risk of malaria transmission. This mosquito is associated with great collections of water and can be very common at households in Rondônia[9]. The development of studies on the biology and geographic distribution of this mosquito at the east of Santa Catarina is urgent, to better evaluate the potential risk, besides being of fundamental importance to improve and maintain the epidemiological vigilance in that area of the state, there is greater potential for the contact of human populations with the mosquitoes in those areas than at forest areas, and the plentiful presence of this potential vector represents a great risk of malaria transmission. This mosquito is associated with great collections of water and can be very common at households in Rondônia[9]. The development of studies on the biology and geographic distribution of this mosquito at the east of Santa Catarina is urgent, to better evaluate the potential risk, besides being of fundamental importance to improve and maintain the epidemiological vigilance in that part of the state. The susceptibility of the mosquitoes from the state to samples of human Plasmodium species shall be tested.

The finding of this mosquito at the Indaial municipality[4], where Plasmodium-infected howler monkeys have been reported, should be emphasized. Since the vertical distribution of A. deaneorum is not known, Anopheles cruzii, which moves easily between soil and canopy[11], continues to be the prime suspect as the responsible for transmission between monkeys and to humans at Santa Catarina[12].

REFERENCES

Marcondes CB and Freitas VF - A new malaria vector in Santa Catarina  


