



## **Mosquito Species Trappability during the Summer Season in some Areas of Albania: A Comparison between the Techniques Used for Collecting Adult Mosquitoes<sup>#</sup>**

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*Accepted June 06, 2012*

**Abstract:** Mosquito species trappability is related to the capturing techniques used. They show a different attractiveness and capturing rate by the techniques used. CDC attracts different species of mosquito compared to the HLC and RC. Some species trend to be captured with all the three techniques. In order to see and compare the species of mosquitoes in relation with the capturing techniques used, a study was undertaken to classify the mosquito species by these techniques from May to August, 2011. CDC technique was used in almost all the study stations, HLC was used only in Kucove (Kozare); Lushnje (Divjake), and Tirana, meanwhile RC other than these three stations has been performed in Vlore (Panaja); Saranda; Korce (Dishnice and Goskove); Pogradec; Durres (Shenpjeter), and Malesi e Madhe (Rapsh). CDC-s was set in stations of cattle shelters, horses, chickens pen, turkey's pen, ducks, and human houses. Only one person was involved in the HLC and RC collection. In total 1219 individuals of adult mosquitoes were collected with all the three techniques. 567/1219 (46.51%) were collected with CDC; 320/1219 (26.25%) with RC, and 324/1219 (26.58%) with HLC. The most predominant species captured with CDC were *Ae. vexans* (226/567; 39.35%), *Cx. pipiens* (119/567; 20.99%), and *Cx. impudicus* (86/567; 15.17%). The predominant species collected with RC were *Cx. pipiens* (168/320, 52.5%), and *Oc. caspius* (85/320, 26.56%). The predominant species collected with HLC were *Cx. pipiens* (144/324, 43.44%), and *Ae. albopictus* (85/324, 26.24%). Our results showed that *Cx. pipiens* were attracted by the three techniques; *Oc. caspius* trended to be captured only with RC; *Ae. albopictus* was captured only with HLC; *Cx. impudicus* and *Ae. vexans* were collected better with CDC.

**Keywords:** *Mosquito, trappability, attractiveness, CDC light traps (CDC), resting catch (RC), human landing catch (HLC), Albania.*

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<sup>#</sup>This paper has been presented at ICE-2012 Tirana, Albania