عنوان مقاله:

Distribution, ecology and biodiversity of mosquitoes (Diptera: Culicidae) with emphasis on Aedes caspius and Aedes vexans in East Azerbaijan Province, Northwestern Iran

محل انتشار:

دومین کنگره بین المللی بیماریهای منتقله بوسیله ناقلین و تغییرات آب و هوایی و چهارمین کنگره ملی حشره شناسی پزشکی ایران (سال: 1398)

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خلاصه مقاله:

Background: The abundance, diversity, distribution and ecology of mosquitoes (Diptera: Culicidae), especially arbovirus vectors are important indices for arthropod-borne diseases control.Objectives: Determine of ecology and biodiversity of mosquitoes in East Azerbaijan Province.Methods: Larvae and adult mosquitoes were collected using the standard methods from different habitats in nine localities of three counties in the East Azerbaijan Province, Northwestern Iran during June to October 2017. In addition, species richness (R), Simpson's diversity index (D), Shannon–Wiener index (H′) and evenness (E) as measures of diversity, were calculated.Results: Overall, 1401 mosquito specimens including 1015 adults and 386 larvae were collected in the study area. The properties of geographical larval habitats were recorded. Four genera along with 10 species were collected and identified, including Anopheles hyrcanus, An. maculipennis s.l., An. superpictus s.l., Aedes caspius, Ae. vexans, Cu-lex pipiens, Cx. theileri, Cx. perexiguus, Culiseta longiareolata and Cs. subochrea. Among the three counties, Ahar region presented the highest species richness (R: 1.5) and diversity values (D: 0.79, H': 1.74, E: 0.73).Conclusions: This study provides important information on the diversity, distribution and ecology of ten mosquito species in the region. This information leads to a better understanding of mosquito population dynamics in relation to vector control measures

کلمات کلیدی:

Diversity; Ecology; Mosquitoes; Arbovirus vectors; Iran