

MOLECULAR IDENTIFICATION AND CHARACTERIZATION OF VGSC GENE, ITS2, RAPD AND MICROSATELLITE REGIONS IN MAIN MALARIA VECTORS OF EASTERN MEDITERRANEAN

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Anopheles culicifacies, *An. stephensi* and *An. fluviatilis* are three main malaria vectors in Eastern Mediterranean region, especially in Iran and neighboring countries.

By using RAPD and rDNA-ITS2 PCR, we identified genetically different populations within these three species, which is related to their ecology and role in two cycles of malaria transmission. Further characterization of their voltage-gated sodium channel gene, selected microsatellite and inverted repeat regions, generated some baseline and applied data (AY342398-AY342399-AY3423400, AF402296, AF402297, AY157316, AY157678, ...). The comparison of these sequences with those previously published and submitted data in GenBank from other anophelines, along with those epidemiological and ecological data may provide a better understanding on the genome of malaria vectors and also designing and implementation of control programs in Iran and Eastern Mediterranean region.