About a century ago mosquitoes were confirmed to be carriers of malaria parasites, the most serious infectious disease in the tropics. Over 500 million clinical cases are reported, resulting in 2 million deaths annually. Despite the extensive *efforts* to combat malaria over the past six decades, it still remains a scourge in more than 90 countries inhabited by 40% of the worlds' population. Hope for eradication of the disease has been frustrated by a number of challenges, such as: emergence of drug and insecticide resistant strains of *Plasmodium* parasites and *Anopheles* mosquitoes, respectively, global warming, re-introduction of vectors in areas initially free of malaria and environmental concerns. Alternative control methods and materials that are effective against the target mosquito species, with minimum detrimental effects on the environment, are needed. One of such methods is the application of selected botanical derivatives against the target mosquito species. This involves the use of plant-derived repellents, insecticides, larvicides and insect growth regulator (IGRs). The larvicides act by killing the larvae, while IGRs inhibit the growth of immature stages of the insect larvae before their emergence into adults. The present study was designed to examine the anti-larval (larvicide/IGR) activity of *Vitex* species, from the coastal region of Kenya, on *Anopheles gambiae.* Seven species of Vitex were collected for investigation. Different parts of the plants (root bark, stem bark, leaves and fruits) were air-dried and ground into fine powder. They were soaked in methanol for 7 days filtered and the extracts concentrated under reduced pressure in a rotary evaporator. The crude extracts were bio-assayed against *3rd* instar *An. gambiae* larvae. Two plant extracts *(Vitex payos* and Vitex strickerii) had high anti-larval and IGR potency. The extracts were subjected to bioassay-guided fractionation. The isolation and purification of bioactive compounds was done using solvent partition and chromatography: CC, PTLC, VLC and HPLC. A total of 6 compounds: 20-hydroxyecdysone (65), stigmasterol (88), 3-hydroxy-4',5,7-trimethoxyflavone (89), 5-hydroxy-7-methoxyflavanone (90), 2',6'-dihydroxy-4',4-dimethoxychalcone (91), 5-hydroxy-4',7-dimethoxyflavanone (92), were isolated. Three of the compounds (5-hydroxy-7-methoxy-flavanone (90), 20-hydroxyecdysone (65) and 3-hydroxy-4',5,7-trimethoxyflavone (89)) showed good larvicidal activity (LD_{5O} = 7.781, 51.59 and 54.57 ppm) against 3^{rd} instar *An. gambiae ss* larvae). A new compound, 3-hydroxy-4',5,7-trimethoxyflavone, was reported for the first time. In addition, the other two flavonoids were isolated from Vitex species for the first time. The structural elucidation of the isolated compounds was done using physical properties, (melting point, optical rotation), and spectroscopic methods (IR, UV, NMR and MS).