Acetone and methanol extracts of different parts of three Vitex species (leaves and stem bark of Vitex trifolia, leaves, stem bark and root bark of Vitex schiliebenii and stem and root bark of Vitex payos) were evaluated for their potential to control Anopheles gambiae Giles s.s. larvae (Diptera: Culicidae). The extracts gave different levels and rate of mortality of the larvae. Some (methanol extract of V. trifolia leaves, acetone extracts of stem bark and leaves of V. schiliebenii, acetone extract of root bark of V. payos) caused 100% mortality at 100ppm in 72hours, with those of V. schiliebenii and V. payos showing faster rate of mortality (LT50=8h) than that of V. trifolia (LT50=14h). At lower doses of these extracts (≤ 50ppm), most of the larvae failed to transform to normal pupae but gave larval-pupal intermediates between 4-14 days of exposure. Some pupated normally but the adults that emerged appeared to be weak and died within 48hours. Extracts of the stem bark of V. payos showed interesting effects on the larvae. Initially, the larvae were relatively hyperactive compared to those in control treatments. Later, the ones that did not transform to larval-pupal intermediates became stretched and inactive and died and floated in clusters on the surface. These observations suggest some interesting growth-disrupting constituents in the plants, with possible application in the practical control of mosquito larvae in aquatic ecosystems.