Trialeurodes vaporariorum Westwood (Hemiptera: Aleyrodidae) is among the most common whitefly species found in greenhouses and it is primary pest in several vegetable and ornamental plants cultivated in greenhouses. Also, it is a difficult pest to control due to its high reproductive rate, and rapid spread feature. The study aimed to find out the effects of juniper, rosemary, oregano, lavandin, peppermint, eucalyptus, Atlas cedar, and ginger essential oils on oviposition behavior of the pest. The results of the study demonstrated that repellent index (RI) of these oils were −11.46, −67.74, 87.14, 20.25, 30.09, 49.37, 25.39, 7.51, respectively. Consequently, effects of rosemary, oregano, and eucalyptus oils on oviposition behavior of the pest were found statistically significant. Utilization from the attractant effect of rosemary oil and repellent effects of oregano, and eucalyptus oils within the scope of integrated pest management will be a good complement to the control methods applied against the pest in an environmentally friendly approach.