This study was focus on identifying attranctants and repellents used in biological control to identify the volatile organic compounds VOCs emitted by healthy and infested citrus seedlings with California Red Scale (Aonidiella aurantii (Maskell) (Hemiptera: Diaspididae)) using headspace solid-phase micro extractions (HS-SPME) combine with gas chromatography (GC). In this research we identified the chemical stimuli emanating from uninfected and infested citrus plant. We identified >80 Volatiles Organic Compounds four of these (Limonene, β-Ocimene, p-Cymene and ?-Terpinene) were increased by with California red scale infestation and four (Farnesene, β- Elemene, β-Bisabolene and Nerol) were decreased.