Pistachios are a strategic product with a special position among agricultural products. However, production of this crop has been affected by various factors, including pests, being regarded as the most important of them and causing great damage to horticultural products [1]. The common pistachio psyllids, *Agonoscena pistaciae* Burckhardt and Lauterer (Hemiptera: Psyllidae), are known as the most destructive pests of pistachios throughout Iran [2, 3]. In a study aimed to assess the amount of pesticides needed to be applied against pests, it was made clear that about 14,000 tons of pesticides were used during the time period of 2010-2014 [4]. Application of such a big amount of pesticides with direct and residual effects is the main causing factor for environmental contaminations and resistance of pests to different groups of pesticides [5, 6]. Resistance of medically important insects to pesticides showed that the level of resistance to all groups of insecticides increased during the past 20 years in the Iranian public health sector [5]. Chemical control is the main approach to managing *A. pistaciae* in pistachio orchards. To mitigate effects of this agricultural pest, the use of organophosphate (OP) pesticides, such as phosalone, is very common in controlling it. However, other groups of pesticides have been used for this purpose as well [2, 3, 7, 8]. Emergence of resistance to pesticides has been reported in the agricultural sector, such as the public health sector. Thus, different levels of resistance to some pesticides in the Rafsanjan psylla population have been reported in this dangerous pest of pistachios, including hexaflumuron, acetamiprid, and spirotetramat [9, 10]. Similarly, comparison of susceptibility levels of different psylla populations in the Kerman province showed that the Rafsanjan population was the most resistant one to phosalone [3, 11]. Biochemical assays aimed at detecting resistance mechanisms in both resistance psylla populations showed that esterase detoxification was the main reason for metabolic resistance to hexaflumuron, acetamiprid, spirotetramat, and phosalone in the Rafsanjan population of pests [3, 10]. However, management of resistance to pesticides in this destructive pest is the major issue in its chemical control. To achieve this goal, some factors, such as minimizing pesticide use, avoiding tank mixes, avoiding use of persistent chemicals, and use of long-term rotations of pesticides from different pesticide groups could be taken into account.
References


