

## Abstract

A Brown rot disease is one of the most important diseases of stone fruit trees as was marked by several species of fungi *Monilia*. In this study 70 samples of bloom and suspected contamination fruit during from 2010- 2011 were collected from the cities of Golestan province. Apothecium possible to produce in the garden, shadow, experimental field plots, shadow and the laboratory was investigated. Control of disease by comparing the effects of several pesticides (copper oxychloride-chloride, RoveralTS and Karbndazym), and biological compounds (Subtelin and Trichodermin B) based on a completely randomized factorial design in January 2010 to May 2011 in Garden Collection Foundation oppressed in Aliabad assessment and was conducted. To examine the susceptibility / resistance of different cultivars of peach (Angeri, Shast roze and Zaferani), plum (Ghatretala, Shublon and Santaroza) and nectarines (Cibi, Redgold and Moghan) during bloom and fruit the garden is completely random experimental design with nine treatments and three replicates were performed. Changes in total phenol levels after incubation in four time randomized factorial design was evaluated. The survey results showed that two species, *M. laxa* and *M. fructigena* are major causal agents of brown rot disease, stone fruit in Golestan province with the order 1 / 99 percent. *M. fructigena* has spindle-shaped conidia with size of  $2/10-6/6 \times 4/17-5/12 \mu\text{m}$  and a colony with yellow pea-shaped, but about *M. laxa*, spindle shape was oval and elongated with size  $9-5 \times 15-11 \mu\text{m}$  and the colony was gray with lobed margins. In none of the conditions tested did not produce Apothecia. Effects of fungicides and biological products used on the amount of blight bloom caused by the pathogen *M. laxa* was significant ( $p < 0.01$ ). So that the most effective (%7/083) to roveralTS and minimal impact to (%22/75) was associated Trichodermin B. But the amount of fruit contamination with Trichodermin B to %25 and RveralTS to %9/166 respectively in the group that reached statistical b and f place. Severity of infection (wound diameter) with Trichodermin B 22/5 millimeter, and 27/667 mm was to copper oxychloride. The results of the susceptibility / resistance of stone fruit cultivars the pathogen *M. laxa* in the flowers and blossoms burning was means ( $p < 0.01$ ). So Zaferani and Shast roze of the peach cultivars, respectively, with an average of %18/333 and %21/333 the contamination in the statistical a and b are the most sensitive and plums Santaroza and nectarines cibi with an average of %5/333 and %4/333 pollution placed in the d group and most resistant varieties to this disease in bloom have been. But the fruit, peach Shast roze by averaging %25/667 and Angeri with %24/667 in a group most and Cibi nectarine and Shublon plum in c grouped have been having the lowest sensitivity. The severity rot in Shast roze peach cultivar was 34/889 millimeter and of Shublon plums 13/557 mm placed in group a and d, respectively, which were Phenol extraction and compared the results of the total variance in the time of (1, 2, 4 and 6 days after inoculation of the fungus) on different cultivars showed the highest phenol 12/884 micrograms per gram of leaves of an Cibi nectarine and lowest 9/7 micrograms per gram of leaf of peach varieties Zaferani is the way in which statistical a and f were. The total amount of phenol the sixth day after inoculation increased and amounts of 14/709 mcg was reached in a statistical category.

Key words: Apothecium, Brown rot, sensitivity, Pesticides, Total phenol, stone fruits, *M. fructigena*, *M. laxa*



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it biological and chemical control in  
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