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**THE FIG SOURING DISEASE IN KASHAN
AND ITS TRANSMISSION FACTORS¹**

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SUMMARY

Souring is a disease of ripe fig fruits. The yeast *Hanseniaspera vineae* Vander Walt et Tscheuschner was found to be the causal organism of this disease. This pathogen remains on the previous year infected fruits during the autumn and winter. In summer, when the fruits start to ripen, the pathogen is carried by some insects such as *Drosophila* sp. and *Zaprionus* sp. (Drosophilidae), *Carpophilus freemani* Deb., *C. obsoletus* Erich. (Nitidulidae) into the fruits through their eyes if opened and infect them. In addition to the above insects, *Zanchius breviceps* Wag. (Miridae) and *Planococcus ficus* Sig. (Pseudococcidae) can also spread the yeast on the trees. Infected fruits become soaked and translucent. Gaz bubbles form in the pulp and a jellylike exudate flows off the eyes. Alcoholic fermentation odor which is followed by that of acetic acid is smelled. After drying, the infected fruits remain as black shrivelled masses on the trees for next year. The bursted pomegranate fruits are also infected by the yeast and they are full of sticky jellylike exudate. Mites such as *Tetranychus urticae* Koch (Tetranychidae), *Aceria ficus* Cotte and *Aceria* sp. (Eriophyidae) which feed on

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fig trees are not able to transmit the yeast into the fig fruits.

REFERENCES

- BEETH, C., 1971 - *Methods in Microbiology*, p. 77, Vol. 4, London, New York.
- LEACH, J. G., 1940 - *Insect transmission of plant diseases*, pp. 234 - 240, London, New York.
- LODDER, J., 1977 - *The yeasts, a taxonomic study*, pp. 213 - 214, Amsterdam, Oxford, New York.
- SHEIBANY, H., 1983 - *Horticulture*, Vol. 4, Tropical and subtropical orchards, pp. 193 - 223, Tehran (in Farsi).

SUMMARY

Scouting is a disease of ripe fig fruits. The yeast *Wickerhamomyces Vain-der-Wahl* et Tschschacher was found to be the causal organism of this disease. This pathogen remains on the previous year infected fruits during the autumn and winter. In summer, when the fruit starts to ripen, the pathogen is carried by some insects such as *Drosophila* sp. and *Zygonota* sp. (Drosophilidae) (Diptera) into the fruits. In addition to the above insects, *Phaenocarpa* (Mord.) (Mord.) (Mord.) can also spread the yeast on the trees. Infected fruits become soaked and translucent. A jelly-like substance flows off the eyes. After formation of a jelly-like substance, which is followed by that of acetic acid is observed. During the infected fruits remain as black shrivelled masses on the trees for next year. The husked-pomegranate fruit are also infected by the yeast and they are full of jelly-like substance. Which such as *Wickerhamomyces* (Koch) (Tschschacher) (Tschschacher) (Tschschacher) which feed on

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