

White Peach Scale in blackcurrants in France





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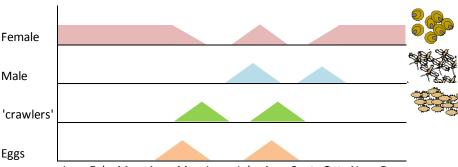
The situation in blackcurrants

White peach scale (*Pseudaulacaspis pentagona* - Targioni Tozzetti) a wide polyphagous *Diaspididae* scale (almost on 240 hosts). <u>It has became the major pest on blackcurrant</u>. Its presence on woody twigs causes their decay by removing sap from the plant (photo a). If infection is severe, death of bush can occur. Scale populations are disseminated by wind and human activity. In infected fields, populations increase very quickly. Yield loss could exceed 50% in two years.

White peach scale life cycle

Two generations (often three) are reported on blackcurrant. overwinters as a mated female. Eggs are laid at the end of April or beginning of May (photo b). Male eggs are orange and female eggs are white. First instar ('crawler') is the disseminating stage. It is also the more susceptible stage because not protected by an armor. After, larva fixes on woody parts. It begins to make a wax cover. Male forms a white puparium (photo c) and female creates a new armor. Male can not feed, it lives a few days for mating. New eggs will produce second generation.

Presence of each stage



Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

White peach scale management

Chemical management

Female protection by shield prevents most insecticides to be effective. In France, only paraffinic oils (on overwintering females), Thiacloprid (on first generation crawlers) and Chlorpyriphos Methyl (after harvest, on crawlers) are registered. Those products do not give good results. Scale population still increase. Spirotetramat is tested, with fluctuant results.

Biological control

As chemical is not a durable solution, auxiliary insect has been prospected. Three insects are known in France: two *Hymenopterae* (*Encarsia berlesei* and *Aphytis proclia*) and a *Coleopterae Coccinellidae* (*Rhizobius Iophantae*, photo d). *R. Lophantae* is polyphagous on *Diaspidida*e, and stronger than *Hymenopterae*. Tests have beginning with *R. Lophantae* on blackcurrants.



a: Infected bushes on the left



b : Female with eggs after removing armor



c: empty male puparium persisting during winter



d: Adult of R. lophantae

Bibliography

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