

2-15. Biologically Intensive Mite Management in Pear: Good and Bad Cases

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Twospotted spider mite (TSM) and European red mite (ERM) are two most important phytophagous mites in pear. Applying population model, monitoring, biological control, and chemical control were integrated into mite management of pear in rain-protected plastic house and open fields. Too early season interaction of TSM-predatory mite in the ground vegetation resulted in elimination of both mites from the plastic house, and allowed consequential TSM outbreak in mid June. After acaricide treatment, the second outbreak of TSM in mid August was controlled by releasing predatory mites. In open field, Release of *A. womerseleyi* successfully established and provided biological control of TSM in pear orchard with a native phytoseiid mite, *Amblyseius makuwa*. Biological control and monitoring-and-spray resulted in significant reduction of acaricide application. Here we also report one bad case of ERM management, where acaricide resistance and proper selection of biological control agent need careful consideration for mite management. Further study area was presented.