Application Timing of Agri-Mek Oil

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Application of Agri-Mek oil to the Anjou cultivar at the petal fall timing on May 2 resulted in approximately 80 days of twospotted spider mite (TSM) suppression. Initial reduction in TSM numbers was very slow, taking about 2 weeks before effects of the application were apparent. This same pattern was observed following petal fall treatment to the Bartlett variety where residual control was measured at about 70 days. This length of TSM suppression achieved with this timing would not generally be sufficient to span the entire preharvest period and would most likely require an additional acaricide application to prevent significant leaf damage.

The 1st cover spray timing of Agri-Mek oil (May 24) resulted in about the same length of residual control, i.e., 80 days, as found following the petal fall treatment. However, resurgence in TSM densities after this length of time was of little concern as harvest of the Bartlett fruit had commenced and that of Anjou was only 2 weeks away. Thus the 1st cover timing was considered to have provided seasonal TSM suppression.

Relatively poor TSM control was measured following the Agri-Mek oil treatment at the 2nd cover timing (June 22) with residual suppression lasting perhaps 30-40 days depending on variety.

Pear Psylla (PP). PP densities following the petal fall treatment, as measured from May 9 through July 1, reduced nymphal densities by about 52%; for the 1st cover treatment (June 4-July 15) by 73%, and for 2nd cover (July 1-July 15) by only 3%. The span of time over which the Agri-Mek oil showed some degree of PP suppression on Anjous was 60 days, 38 days and 9 days for the petal fall, 1st and 2nd cover treatments, respectively.

While none of the Agri-Mek oil timings resulted in outstanding PP control, it would appear that the 1st cover treatment gave the most suitable suppression for control of this pest as well as for the TSM. However, it is possible that the most efficacious Agri-Mek oil timing may vary from year to year depending upon the condition of pear leaves at various developmental stages.