Thresholds, Monitoring, and Sampling

Geostatistical analysis of pandemis and obliquebanded leafroller distribution in apple

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Abstract: Geostatistical analysis of PLR and OBLR distribution in apple shows that populations start out clumped and expand outward from hot spots over the course of the season. The analysis also shows that samples spaced more than 150 m apart are statistically independent, which allows us to take fewer samples per acre and still achieve an accurate representation of the population. However, application of Bt resulted in a fragmented distribution with statistical dependence extending less than 10 m. The fragmentation is probably an indication of poor spray coverage, but the effects would drastically affect sampling programs.