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**APPLICATION OF BLOSSOM THINNERS FOR CROPLoad MANAGEMENT
IN APPLES AND STONE FRUIT**

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Hydrogen cyanamide (Dormex), sulcarbamide (Wilthin), pelargonic acid (Thinex), endothalic acid (Endothal), and ammonium thiosulfate (ATS) were used at full bloom for blossom thinning of apples and stone fruit during the last 17 years. In our search for an effective blossom thinner, effects of various rates and/or timings of hydrogen cyanamide, ATS, and Wilthin on fruit set, quality, and yield of 'Fuji', 'Delicious', and 'Rome' apples and different cultivars of peaches and plums have been extensively studied. We also found that Tergitol TMN-6 at 0.75% to 1.25% reduced blossoms in peaches, nectarines, and plums in the Pacific Northwest. Tergitol TMN-6 also has been an effective blossom thinner for 'Rome Beauty' apples. We have also used lime sulfur and Fish oil and combination of these chemicals and found them to be effective organic blossom thinners for apples and peaches. Higher concentrations of these chemicals were more effective and double application often resulted in more blossom thinning than a single application. Fruit size was increased when effective blossom thinning occurred. Wilthin, at high concentrations, caused fruit marking in apples. Application of blossom thinners, such as Dormex, fish oil, lime sulfur, or Tergitol TMN-6 can result in regular cropping and reduce the cost of fruit production.