

Evaluation of Different Insecticides for the Control of European Elm Scale

Trial Objective:	Evaluate different insecticides for control of European Elm scale on American Elm tree species
Pest:	European Elm Scale (<i>Gossyparia spuria</i>)
Species:	American Elms (<i>Ulmus americana</i>)
Location:	Fort Collins, CO
Duration:	May 2018 – June 2019
Trial Layout:	Randomized design with a minimum of four trees per treatment. Identify and mark each treatment with a plant id tag & map.
Treatments:	Soil injections will be made with a motorized backpack sprayer and an HTI soil injector. Soil injection sites should be placed in a ring spaced evenly around the base of the tree, within 1-foot of the root flare. Using one injection site per 2 inches DBH, inject 250 ml of solution per site (125 ml per inch DBH). Bark spray applications will be made with a backpack sprayer to deliver even coverage around the tree trunk, from the base of the tree to 5', spraying to run-off (60-80 DBH"/ gallon solution).

Treatment	Rate	Application	Application Timing
1. RTSA 722	2.5 ml in 250 ml water/ DBH"	Soil Injection	Mid to late May 2018
2. RTSA 722	225 ml + 2.5 fl oz Scrimmage /gallon	Bark spray	Mid to late May 2018
3. Transtect	6 packets / gallon water	Trunk spray	Mid to late May 2018
4. Transtect	12 packets / gallon water	Trunk spray	Mid to late May 2018
5. UTC	N/A	N/A	N/A

Trial Evaluation:

Sample one foot sections of new growth on cardinal directions of the crown (4 areas) mid canopy and count number of live individuals in July-August and October.