



Evaluation of Potential Effects on Plant Growth of Engineered Wood Products and Dimensional Lumber

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Nature of Work: This is a 2-year study to evaluate effect on plant growth of engineered wood products and dimensional lumber when used as a mulch on ornamentals. The chipped material, raw wood without any colorant added, had been sifted; mulch particles were less than 5/8 inch in size.

The research involves a study of the effect of leachates from the engineered wood on the growth rates of three woody ornamental varieties grown in pots. The mulch is placed on top of the soil in the pots. Evaluation will be taken on their ability to tolerate variable soil leachates from the mulches.

This study uses three common landscape plants -- Burford Holly (*Ilex cornuta*), Loropetalum 'Sizzlin Pink' (*Loropetalum chinense* var. *rubrum*), and Kurume azalea (*Rhododendron obtusum*).

Design of study:

** Four treatments

1. Standard McCorkle's (SM) mix plus a mulch of 3" pine straw
2. SM mix plus a mulch of 3" engineered wood products (EWP)
3. SM mix plus a mulch of 3" 50% EWP plus 50% dimensional lumber
4. SM mix plus a mulch of 2" (EWP) plus 1" pinestraw

3 Woody species

Ilex cornuta 'Burfordii' Holly
Loropetalum chinense var. *rubrum* 'Sizzlin' Pink'
Rhododendron obtusum Kurume azalea 'Hot Shot'

Evaluation: This is a 2-year study to evaluate the effect on plant growth of engineered wood products and dimensional lumber when used as a mulch on ornamentals.

Plants will be grown for one year. After the first year plant growth will be determined by top growth measurements. At the end of the second year growth will be measured by removing the above ground portions of the plant and measuring dry weight.

Significance to the Industry: Engineered wood products and dimensional lumber may be useful as mulches for ornamentals in the landscape if plant growth is not negatively affected. Instead of having to remove the wood products to a landfill, builders could grind on site and use this material as a mulch

around newly planted landscapes.