Decorative Female *Pinus strobus* (White Pine) Cones as Mulch for Household Plants

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**ABSTRACT**

Using female *Pinus strobus* cones as mulch for household plants *Begonia obliqua* (begonia grandiflora), *Chlorophytum comosum* (spider plant), *Philodendron bipinnatifidum* (tree philodendron), and *Yucca gloriosa* (mound lily) is recommended.

**Keywords**: *Pinus strobus* cones, Soil; Household plants

Several small bags of decorative female *Pinus strobus* cones dyed in a variety of colors were purchased on the same date in January. The paint on the pinus strobes cones was described as non-toxic.

The cones were placed on top of the soil in large clay pots containing household plants *Begonia obliqua* (begonia grandiflora), *Chlorophytum comosum* (spider plant), *Philodendron bipinnatifidum* (tree philodendron), and *Yucca gloriosa* (mound lily). The pots had draining holes at the bottom [1].

The control sample contained identical plants in identical pots, filled with identical soil, in the same location, but without any objects placed on top of the soil in the pots. Both sets of plants were purchased from a reputable grower in December. Both sets of plants were initially healthy and had been watered at the same time with a watering can three times a week with the same amount of tap water, according to the grower instructions. The plants were kept in a single-family two-story house on the second floor. The temperature at the plant location was 68°F and the air humidity was 70%. There were no drafts in the plant location.

After a month, the plants in the control group began to dry out and turned yellow. After two months, the plants *Begonia obliqua* (begonia grandiflora) and *Chlorophytum comosum* (spider plant) in the control group turned brown and died. After three months, the remaining plants *Philodendron bipinnatifidum* (tree philodendron) and *Yucca gloriosa* (mound lily) in the control group turned brown and died [2].

The plants mulched with pine cones were thriving; however the paint on the cones was fading. After three months, the plants with the pine cones were growing nicely, even though the paint on the cones completely vanished and the cones started showing signs of decay.

**RECOMMENDATION**

We strongly recommend using female *Pinus strobus* cones as mulch for household plants *Begonia obliqua* (begonia grandiflora), *Chlorophytum comosum* (spider plant), *Philodendron bipinnatifidum* (tree philodendron), and *Yucca gloriosa* (mound lily). However, it seems that non-colored cones would work better than the colored ones. We also recommend purchasing female *Pinus strobus* cones in bulk to minimize the cost.

**FURTHER WORK**

We would like to repeat the experiment described above with different houseplants and with different pine cones. We predict that the plants mulched with most varieties of pine cones will be growing better then identical plants without pine cone mulch. We would also like to check if the paint on the original female *Pinus strobus* cones had any influence on the outcome of the experiment. We would also like to repeat the experiment described above with vegetables grown in containers, using different varieties of pine cones as mulch. We predict that vegetables grown with pine cone mulch will produce better harvest than identical plants grown without mulch.

**REFERENCES**
