

Wylie Keller
Senior Division Plant Sciences
Wool as a Potting Media

In the greenhouse and nursery industry potting soil is an important factor for the growers. These potting mixes are often made with ingredients such as peat and perlite, which could be considered non-renewable resources. These ingredients also tend to cost the grower a lot to use. In recent years, a movement to go green and rely on renewable resources has swept the country. A more inexpensive and renewable alternative for peat and perlite might be wool. Wool has been largely replaced by synthetic fibers in the textile industry and as a result is quite inexpensive. It is proposed that wool may be healthier and more efficient as a potting media than either peat or perlite. In this experiment wool was mixed with peat and perlite in six different ratios to determine if wool would be a replacement for either. Russet Potatoes, Early Contender Bush Beans, Harmony Hybrid Spinach and Tokyo Cross Hybrid Turnips were grown in these potting mixes. Two fertilizer treatments were used. The plant's height, leaf count, leaf area, and leaf color were measured. Yield was also measured accordingly for each type of plant. The color readings provided the most significant results. These readings showed that the more wool that was in the soil, the greener the plants were. This finding leads to the conclusion that the more wool that is in the soil, the healthier the plant will be. The best two soils types were the ones that contained 45% and 30% wool.