Strobilanthes: Stalled Growth & Flowering

The short days of winter will result in the induction of flowering and stalled growth with Persian shield. This Alert describes the diagnostic signs and ways to avoid the problem.

Persian shield (Strobilanthes dyerianus) is one of my favorite bedding plants. I really like the purple and silver leaf coloration. Both last spring and again this year, there are a few cases where Strobilanthes plants were observed with stunted growth, the new leaves were smaller, and a short flower stalk was present (Fig. 1).

The desired characteristics of robust plants actively growing and covered with large purple leaves is the result of long day conditions. Strobilanthes plants flower under short day conditions of winter (Fig. 2). This results in the plants initially developing smaller sized leaves and then flowers. With all the energy going into flower production, the overall plant growth stalls. This
Flower formation in strobilanthes is a short day response. Vegetative growth occurs under long day conditions. From September 21st until March 21st in the northern hemisphere is the time to provide day length extension so the days are 14 hours long or night time interruption to avoid flowering. A typical tactic is to place the plants under lights from 10 pm to 2 am (Fig. 4). If the plants are grown with other light sensitive plants such as poinsettias, black cloth will need to be pulled to avoid light pollution to those sensitive plants.

If your plants have flowers, then give them a hard pinch so that you remove all the smaller reproductive leaves. This may not be feasible if the plant has been grown the entire winter under short day conditions. Place the plants under long day conditions. Provide them with adequate fertility to encourage growth. From my observations, regrowth can be sporadic and often times plants are delayed because of the lag time required for them to size up.
Thus, waiting for regrowth may not be an economically feasible option to be able to have stalled plants ready for spring sales.

**Key Points**

In summary, strobilanthes need long days to avoid stalled growth and flower formation. Lighting should be provided so that the day is extended to 14 hours or provide a night lighting interruption to avoid flowers.

![Stalled growth and flowering due to growing the plant under short day conditions.](image3)

**Figure 3.** Stalled growth and flowering due to growing the plant under short day conditions.

![A simple night interruption lighting and shade system used to provide long day conditions and keep plants vegetative.](image4)

**Figure 4.** A simple night interruption lighting and shade system used to provide long day conditions and keep plants vegetative.