## Case Study: Changes in pH, Microbial Respiration with SGI Metabasalt



## **About The Study**

SGI Metabasalt from the Charmian Plant in Blue Ridge Summit, PA, was tested as a component of potting mix at inclusion levels of 0, 5, 10, and 15% (v/v). Samples were incubated for one week and measured for changes in growth medium pH and microbial respiration at Midwest Laboratories.

## **Key Results**

SGI Metabasalt was determined to play an important role in increasing the growth medium pH to optimum levels. The pH of potting soil is 5.24, which could be too acidic from some plants. SGI Metabasalt increased pH to 6.5, an optimum level for plant growth.

The incubation study showed increased microbial respiration on treatments that received SGI Metabasalt with increasing amounts of the material added per unit organic matter applied.





Figure (a) Effect of SGI Metabasalt on growth medium pH; (b) Effect of SGI Metabasalt on microbial respiration.