

PHOSPHORUS AND POTASSIUM TISSUE TESTING RECOMMENDATIONS AVAILABLE IN NEW PUBLICATION

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The practice of conducting tissue testing for phosphorus and potassium in corn and soybean is a relatively new tool in Iowa crop production. While soil testing has been widely used for decades, proper tissue testing recommendations are still emerging.

A new publication from Iowa State University Extension and Outreach discusses the results of tissue testing research and interpretation at Iowa State University. The publication “Phosphorus and Potassium Tissue Testing in Corn and Soybean” ([CROP 3153](#)) provides interpretations specific for Iowa’s growing conditions.

Iowa research into tissue testing in previous decades has shown that either this was not a reliable practice or the research wasn’t sufficient. As interest in tissue testing has grown in the last few years, there was a need for additional research in order to determine the value of tissue testing and develop guidelines on how to interpret test results.

The resulting publication is the first interpretations for tissue testing specific to Iowa, and is based on 66 site-years of research results for phosphorus and 119 site-years for potassium.

Tissue testing isn’t perfect, but it can be used to monitor nutrient levels available to crops. Now that the research has been completed, people can see the interpretations and results, with information backed by good science. Tissue testing can be helpful in assessing the available supply of phosphorus and potassium for corn and soybean crops when used as a complement to soil testing.

The publication also provides information on how to sample plant tissue, including detailed photographs of the different growth stages of both corn and soybean. The specific part of the plant to be sampled is detailed for the reader.

Additional Information:

Soil Fertility Web Site: <http://www.agronext.iastate.edu/soilfertility/>

Corn Growth and Development: <https://store.extension.iastate.edu/Product/6065>

Soybean Growth and Development: <https://store.extension.iastate.edu/Product/6065>