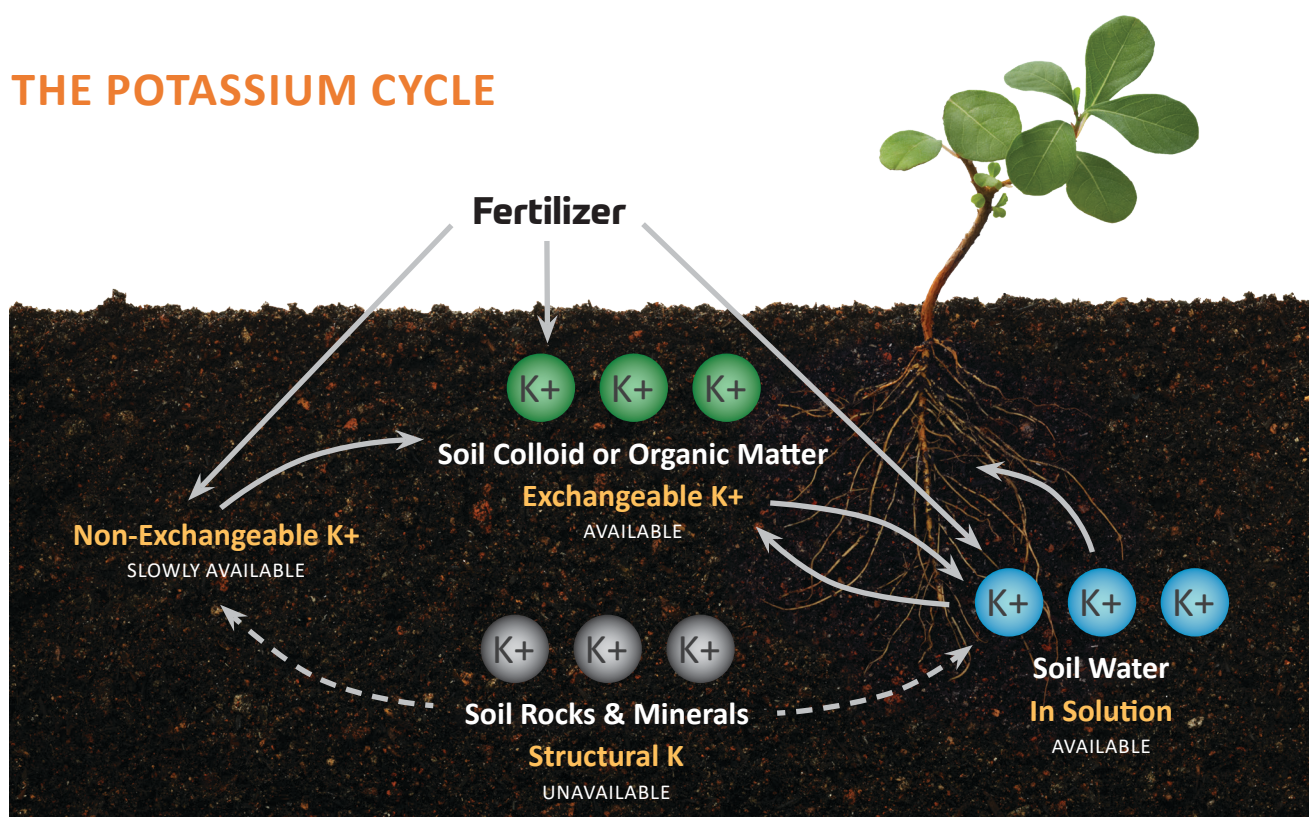


Katalyst[®]

Potassium that Outperforms the Competition

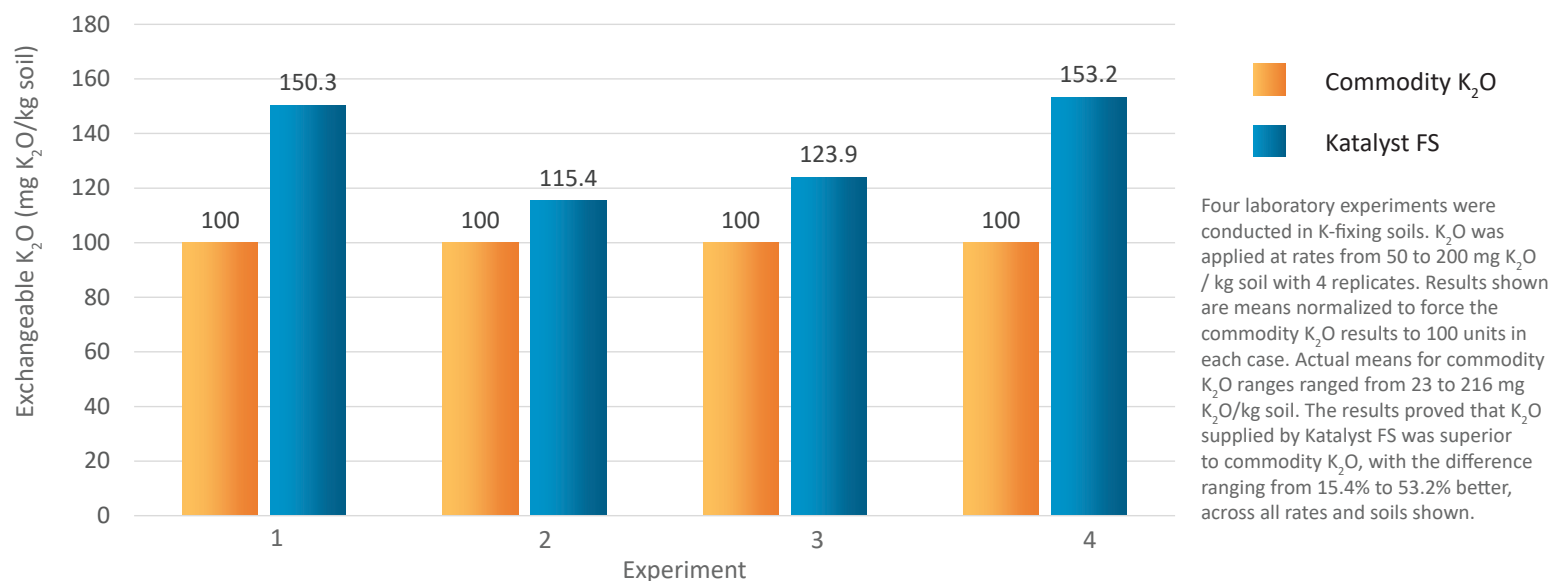
When commodity K_2O fertilizer is applied to the soil, it can move quickly into one of 3 potassium pools. Unfortunately, all too much K_2O is rapidly fixed into the non-exchangeable pool. This pool is almost completely unavailable for plant growth, which means you are wasting most of the K fertilizer you apply. Katalyst family products work in two unique ways: less of the applied K_2O is fixed in the soil, and more is available. K_2O is actually released from the “non-exchangeable” pool. No other K fertilizer on the market has proven research to demonstrate these two features.

THE POTASSIUM CYCLE



Small advantages in resource availability often result in increased rates of growth, which compound over time in a positive feedback loop of plant growth and resource acquisition. This is why the Katalyst FS advantage in-crop is much greater than the numbers shown in the first chart on page 2. We recommend to soil-apply Katalyst products in the field at about 1/3 the rate of commodity K fertilizer.

In soil experiments without a crop, Katalyst FS consistently outperformed commodity K fertilizer, in terms of available K measured in soil.



When commodity K fertilizer is applied to a K-fixing soil, much of the applied K is fixed and thereby unavailable for plant use. In Experiment 5 (200 mg K₂O / kg soil applied), essentially all of the K (177.3/200) of the commodity fertilizer was fixed into the non-exchangeable pool. In contrast, in the same experiment, >200 mg K₂O / kg soil was released from the non-exchangeable pool when Katalyst FS was applied. ***The negative number means that K was released from the fixed soil pool. No other fertilizer on the market has been proven to have this effect.***

Similarly, in Experiment 6, the applied K rate was much lower (50 mg K₂O / kg soil), but a similar trend was observed. Katalyst FS released K₂O from the non-exchangeable soil pool, even though the commodity K fertilizer applied was essentially all fixed. In both experiments, treatments were incubated for 3 days before the soil was analyzed.

Katalyst Products Release Fixed K in the Soil

