

Leveraging Precision Phenotyping Solutions within Corteva Agriscience

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Abstract

Phenotypic trait measurements have enabled breeders to link genomic information to phenotypic information and through this enhance crop performance by breeding for superior germplasm. Progress in this area has been hindered by the limited ability to capture agronomic traits of importance at a large field-based scale since traditional methods for measuring phenotypic traits in field are time and labor intensive and are limited in accuracy and consistency when implemented on large scale. Precision phenotyping efforts have enabled researchers at Corteva Agriscience to collect high quality datasets for important traits that programs had been unable to measure accurately or safely in the past. Specific applications of phenotyping technologies and how these have influenced data collection within Corteva breeding programs around the world will be presented. Technology is rapidly evolving, and by using this technology to develop novel precision phenotyping solutions, breeders are able to capture more high-quality data and gain unique insights.

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