

AYT *Increases* Yields

Pioneer's Breakthrough Technology Promises Significant Yield Increases

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DES MOINES, IOWA

Elite soybean genetics by Pioneer are expected to push yields well into the 100-plus bushel level beginning with this year's crop. Advanced Yield Technology (AYT) is the commercial name of a molecular breeding technique to rapidly scan and identify genes that increase yield. These genes are then incorporated into soybean seed. "Every once in a while there is a technology that comes along that, if you want to stay in the game you have to have it, and I clearly believe this is one of those technologies," said Scott Sebastian, Ph.D, Pioneer's Senior Research Scientist and inventor of AYT. "Actually we had a line on the market last year, 92M53, and this year there are four AYT lines being sold."

AYT will increase yields by as much as 12 percent per acre, according to a company news release. Pioneer brand 94M80 set the world record soybean yield of 139 bushels per acre in 2006.

Until now, molecular breeding techniques used by the seed industry have only produced single-gene defensive traits in commercial varieties. There are multiple genes in complex networks that determine the final yield level achieved. AYT builds on Pioneer industry-leading molecular breeding techniques by allowing researchers to simultaneously select multiple genes to significantly boost yields. AYT is not transgenic, so soybeans developed from this process are not subject to additional regulatory approvals.

"Full implementation of AYT™ combined with molecular breeding technologies will enable Pioneer to make a new class of soybeans that has unprecedented yield potential relative to any-

thing we have ever seen," said William S. Niebur, vice president DuPont Crop Genetics Research and Development. "These technologies



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allow us to incorporate a complete package of offensive and defensive characteristics that could make 100-plus bushel soybean yields a common occurrence in the very near future." Δ