

Soybeans Project Proposal

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Contest link: <http://connect.informs.org/oratc/2017problem>

Problem description:

Sygenta, a U.S. agrochemical company, needs to identify which soybean varieties to commercialize in order to ensure that their products meet their customer's expectations. The product's success is determined by its sales volumes. Before a soybean variety can be commercialized, it passes 3 "stage gates," analogous to a student passing a grade in a course of study. Only elite varieties which pass all 3 gates "graduate" to elite commercial status.

Objective:

1. Predict potential sales volume of each commercial variety which graduated in 2014.
2. Predict which of the soybean varieties (the elites) from the graduation class of 2014 will graduate to commercial sales status (classification problem). In the process of doing so, we will identify patterns in the data that identify elite experimental varieties and expose the non-elite varieties prior to commercialization.