# Potential Economic Value of Temperature-Activated Polymer Seed Coating in the Northern Corn Belt. (C03gesch111002-Poster)

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## Abstract:

Temperature-activated polymer coated seed has the potential to increase net returns by reducing yield loss due to delayed planting and by increasing the use of longer season varieties. A biophysical simulation model was used to estimate the impact of polymer coated seed on corn and soybean yields and on field day availability for five planting periods, two crop varieties and two tillage systems on two different soils using historical weather observations from Morris, Minnesota. Distributions of yields and field day availability were used in an economic optimization model for a representative farm to estimate the potential use and economic value of polymer coated seed. Results show that polymer coated seed increases net returns in corn by 2.50-3.65 USD per acre and in soybeans by 4.50-9.70 USD per acre. Results also show that expected use of polymer coated seed ranged from 45% to 79% of the total corn and soybean acres for our sample farm.

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corn, soybean, economics