

# Bringing new corn genetics to market

To make it into the Corteva Agriscience corn lineup, a hybrid has to be very special. Not quite one in a million...but close. Each year, Corteva evaluates hundreds of thousands of potential corn hybrids, but less than 0.01% make the cut. How do we decide which ones make the grade and make it into your customers' fields?

## Dive into a deep germplasm pool

Corteva is home to one of the world's largest germplasm pools. That offers two advantages. First, it means we can be picky, selecting only the best of the best to carry forward into the marketplace. A deep germplasm pool also allows for genetic diversity, which is critical to developing hybrids that can stand up to unpredictable challenges from nature. With genetic diversity, some hybrids may naturally stand up better to a bout of mid-summer straight-line winds, or better resist a new disease threat. A great example is the way Corteva hybrids are handling tar spot. This disease is so new to the U.S., there are no hybrids yet that are bred specifically for tar spot tolerance, but with greater genetic diversity, some hybrids are showing better resistance to it.

## Crunch the numbers

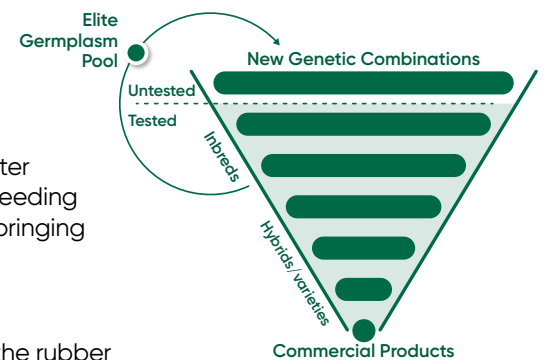
With hundreds of thousands of possible contenders for new hybrids, there are billions of data points to analyze each year. Advanced analytics and artificial intelligence make it possible for Corteva scientists to evaluate such an enormous number of potential hybrids in a given year, while technologies like drones enable faster and more accurate phenotyping in the field. Corteva is also able to conduct more breeding cycles each year to integrate the newest traits into elite germplasm and accelerate bringing new products to market.

## Test extensively

Sophisticated data analysis helps narrow down hybrid options, but then it's time for the rubber to meet the road (or the seed to meet the soil!). Potential hybrids are tested in locations that match local growing conditions all across the U.S. This helps Corteva home in on performance characteristics particular to your customers' growing conditions, maximize choice for independent seed companies like yours and set farmers up for a successful season.

## Put farmers first

There are almost 5,000 research scientists at Corteva dedicated to farmer success, building on a century of leadership in corn breeding. Hybrid development starts with understanding farmer needs and devising solutions to meet them, bringing together high performance, desired agronomic characteristics and advanced trait technologies. With each breeding cycle, we're able to evolve our hybrids for an ever-improving portfolio for the future.



Corn breeding at Corteva begins with a world-class germplasm pool. Corteva researchers evaluate hundreds of thousands of potential hybrids each year, using advanced analytics, technology and testing to determine which ones are best suited to become commercial products. **Less than 0.01% make the cut.**