POD DEFENDR®

The Pod DefendR® trait means outstanding genetic resistance to pod shattering in BrettYoung canola hybrids

BrettYoung's DefendR platform was developed to highlight the superior disease resistance genetics developed by our strategic canola breeding partners. Our next-generation clubroot-resistant hybrids are industry-leading and our strong R, multi-genic blackleg resistance packages have been a key aspect of many DefendR-rated products.

Pod DefendR Shatter Resistance – Flexibility and Peace of Mind

The introduction of pod shatter-resistant hybrids to canola growers several years ago led to a significant increase in adoption of both direct harvesting and delayed swathing of canola crops.

BrettYoung canola growers can now enjoy this same flexibility because of our new pod shatter-resistance trait, which is non-GMO, and delivers dependable levels of shattering tolerance.

Physiology of Pod Shatter

Pod shattering and the seed dispersion associated with it is a survival mechanism found in nature. Yet, despite decades of breeding and domestication, canola pods still have a natural tendency to split and open at maturity, with the goal of scattering seeds.

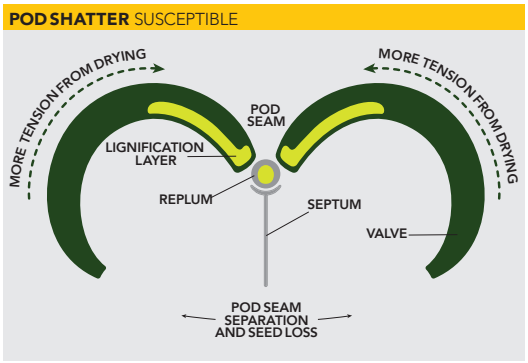
Breeders and researchers, however, have been working to understand the physiology of pod maturation and pod shatter mechanisms. Some canola breeding programs have been able to identify hybrids with higher levels of natural pod shatter resistance through screening and selection. However, this approach has had limited effectiveness relative to the levels of pod shatter resistance achieved with a true genetic trait.

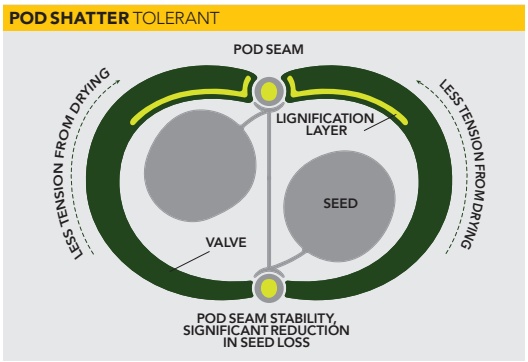
The breeders behind BrettYoung's canola hybrids have been researching other solutions, and what has emerged is an understanding of a complex pathway of gene interaction that controls pod valve function (see figure). Much of the work has meant isolating specific genes from other Brassica species and breeding them into canola to interrupt these shatter-inducing pathways; mustard growers are well aware of the substantial shatter resistance a similar mechanism provides. The result is Pod DefendR, a specific genetic trait that reduces tensions built up at maturity and ultimately, the tendency for pods to split at the pod dehiscence zone (or pod seam) that holds both sides of the pod (valves) together.

Testing

Canola hybrids with the Pod DefendR trait are evaluated in both lab and field, and over different protocols to ensure the presence of the trait and that the reduction of shattering in the hybrid is stable, consistent and effective.

Visit **brettyoung.ca** to learn more about the canola hybrids that feature this exciting new trait.





Learn more at
brettyoung.ca/poddefendR

BrettYoung™
DISTINCT BY DESIGN