

## **CORN POLLEN MOVEMENT AND SEED AND GRAIN PURITY**

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Corn is primarily a wind-pollinated crop. As such corn pollen movement in the environment is a normal, natural phenomenon. Most pollen produced by a tassel does not move far from the plant. However, with millions of pollen grains produced per tassel, tens of thousands of plants per acre and thousands of acres in production; tremendous quantities of pollen are produced and released daily during the summer. How does this impact seed and grain purity?

Production of hybrid seed corn requires effective management of seed purity. Pioneer has decades of experience managing inbred pollination and has a reputation for reliably delivering high levels of genetic purity in corn seed products. Effective pollen management is the key to success. Pollen movement is affected by the physical characteristics of pollen, by the environmental conditions and time of day. The impact on purity results from interactions between pollen dynamics at the source, pollen and silk dynamics in the receiving field and a dynamic environment. Information on pollen physical properties, pollen longevity, transport by the wind, silking dynamics, and pollen competition on receiving silks will be presented in the light of seed and grain purity. Best practices for seed production will be reviewed and considerations of their application in grain production to achieve desired grain purity will be discussed.

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