

## THE RNAi PIPELINE

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### Abstract

RNA-based technologies (e.g., initiation of RNAi via the engineered production or plant surface application of double-stranded RNA, dsRNA) can be applied to a wide range of agricultural improvement objectives. These applications range from the modification of harvestable plant phenotype to crop protection scenarios. Examples are present in current agricultural production while additional applications such as plant-produced dsRNA targeting insect predators are advancing pending regulatory approvals for commercial release. Numerous considerations are taken into account as such products develop that bring forward efficacy, robustness, specificity, and safety of dsRNA as an active agent. A historical perspective, current applications, and prospects will be discussed.

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