

Title: **Develop resilient crops for stable yield**

Abstract:

Agriculture is subject to intense and dynamic biotic pressures, driven by the rapid evolution of pest populations, weed resistance, and shifting pathogen virulence. These threats are complicated by environmental condition making them hard to predict and prepare for effective control solutions. To mitigate these threats and stabilize global crop yields, Syngenta's research and development pipeline focuses on translating fundamental biological discoveries into robust, field ready commercial products. Our strategic focus centers on the discovery and deployment of novel traits conferring broad-spectrum, durable resistance to insect pests, weeds, and plant pathogens.

Recognizing that addressing these complex biological challenges exceeds the scope of any single organization, strategic external collaborations are critical to industry success. By partnering with leading academic institutions and scientists, we foster collaborations that could enrich our RD pipeline and accelerate deployment of trait product.

This presentation will highlight a few key technical research directions in developing disease resistance using Asian Soybean Rust (ASR) as example. We will pivot to Syngenta's approach to develop broad-spectrum and durable resistance against ASR. In this example, we will share how productive collaborations between Syngenta's internal R&D teams and external scientific experts has advanced our RD capabilities in bringing innovations to farmers' fields.