#135

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VIBRANCE OSR: a Novel Seed Treatment Solution for Control of Soilborne Diseases in Oilseed Rape

The European Union is one of the world's leading producers of oilseed rape. Historically, this brassica species was primarily grown as a "break crop" in crop rotations to improve soil quality. In recent years however, it has become very profitable delivering rape seed oil for human consumption and industrial use. In addition the pressed oilseed cake is an important protein source for animal feed production. From the start and throughout the growing season, oilseed rape seedlings and plants are affected by a range of soilborne diseases. The level of damage and its impact on yield is dependent on resistance of genetics, agronomic and weather conditions. Seed treatment of oilseed rape is a wellestablished technology to get the seedlings off to a strong and healthy start, especially in winter oilseed rape before the winter break. Anticipating regulatory constraints with older chemistries, Syngenta Crop Protection AG is developing a seed applied fungicide. VIBRANCE OSR™ contains the three active ingredients Sedaxane, Fludioxonil and Metalaxyl-M for control of damping off and downy mildew (Hyaloperonospora brassicae) diseases. The level of performance of Vibrance OSR™ obtained in replicated pot trials artificially inoculated with damping off diseases such as Fusarium spp., Pythium spp. or Rhizoctonia solani was superior to the current market standard Thiram. In particular, the level of performance against the aggressive soilborne pathogen Rhizoctonia solani was extraordinary with an efficacy of 90%. This level of activity is achieved due to the strong intrinsic potency of the SDHI-fungicide Sedaxane in the 3-way mixture against this pathogen. Furthermore, throughout multiple field trials, Vibrance OSR™ was able to significantly decrease the disease incidence of downy mildew by almost 70% in comparison to the untreated control. In addition to its excellent protection against diseases, VIBRANCE OSR™ has an outstanding seed safety profile. The formulation is designed to fit all deployed coating processes in the preparation of customized recipes with the aim to achieve the highest treated seed quality possible that meet the demands of regulatory requirements. First registration in EU is anticipated in the third quarter of 2020.