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Fungicidal activities of cyflufenamid against various plant-pathogenic fungi

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Abstract:

The activity of a novel fungicide, cyflufenamid, (*Z*)-*N*-[α -(cyclopropylmethoxyimino)-2,3difluoro-6-(trifluoromethyl)benzyl]-2-phenylacetamide, against various fungi pathogenic to plants was investigated. In pot tests, cyflufenamid showed excellent control of powdery mildew caused by various pathogens at 0.8 to 1.6 ppm. In culture tests, several species of Ascomycetes and Deuteromycetes were sensitive to cyflufenamid. Notably, *Monilinia fructicola* was affected at a concentration of just 0.01 ppm. In the life cycle of pathogens causing powdery mildew in wheat, cyflufenamid did not affect infections before the formation of the appressoria, but significantly inhibited the formation of haustoria, colonies, and spores. It also affected the elongation of germ tubes after the germination of spores in *M. fructicola*. In ultrastructural experiments, cyflufenamid induced a reduction in the amount of highly electron-dense material in the vacuoles and immature septa in *M. fructicola*. © Pesticide Science Society of Japan

Keywords:

cyflufenamid, fungitoxic spectrum, powdery mildew

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