



Abb. 1. Gehalt an Indol-3-Essigsäure nach 48-stündiger Inkubation von Weizenblattscheiben mit den Wirkstoffen Prothioconazol, Epoxiconazol, Pyraclostrobin, Trifloxystrobin, Fluxapyroxad und Bixafen.

Gleichzeitig wird durch die Inkubation mit Strobilurinen eine mehr als dreifach höhere Aktivität der pflanzlichen Nitrat-Reduktase beobachtet. Welchen möglichen Einfluss die Nitrat-Reduktase bzw. dessen Produkt NO (Stickstoffmonoxid) hat, wird im Vortrag dargestellt.

Literatur

Iten, M.; Hoffmann, T.; Grill, E. 1999: Receptors and Signalling Components of Plant Hormones. *J. of Receptor and Signal Transduction Research* **19** (1-4), 41-58.

13-6 - Study on fungicide-induced/primed molecular and physiological effects on barley

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Plants can be induced/primed by various biotic and abiotic stresses giving unique physiological states like enhanced disease resistance or tolerance to certain abiotic stresses. This effect has been observed by infection with necrotizing pathogens or colonization of plant roots by beneficial microorganisms as well as by stimulation of various natural and synthetic compounds. Understanding of the molecular mechanisms underlying might provide novel approaches to exploit the genetic potential of plants for increasing plant resistance to pathogen attack as well as tolerance to environmental stresses in the practice, and is therefore of great scientific and practical importance.

Here, we report the effects of fungicide application on plant response to various biotic and abiotic stresses and possible molecular mechanisms underlying.