

Nitric oxide and its important role in plant defence

ABSTRACT

Nitric oxide (NO) is a signaling molecule involved in numerous physiological processes in both animals and plants. The bioactivity of NO is mainly transduced via post-translational modification of cysteine residues of proteins termed S-nitrosylation. Interestingly, a number of key regulatory components in plant defense responses have been found to be regulated by S-nitrosylation making this type of protein modification an important modulator of plant immunity. As a signaling molecule, NO intimately interact with other important molecules such as reactive oxygen species. Since the identification of NO in plants, increasing number of papers is being published in the area of NO biology each year. Here, a collection of papers describing the role of NO in plant immunity has been brought together to provide a bird's-eye view on the focus area.

Keyword: Nitric oxide; Plant immunity; S-nitrosylation