

## 细菌、真菌及植物氮营养信号研究进展

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### Nitrogen signal systems in bacteria, fungi and plants

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**摘要** 氮素吸收代谢是所有生物生命活动的核心部分, 因此, 各种生物对氮的吸收与同化过程都有精细的调节。这种调节依赖于生物对体内氮素状况信号及体外(生长介质中)氮素信号的感受。过去几十年中, 在细菌、真菌中已经对氮素营养信号有了较好的研究, 而植物中则相对缓慢, 但也有了一定的认识。本文重点比较细菌、真菌及植物中氮信号系统的组成, 以期为进一步认识植物中的氮信号接受与转导系统提供启示。

**关键词:** 氮 硝酸盐 信号 细菌 真菌 植物 氮 硝酸盐 信号 细菌 真菌 植物

#### Abstract:

Due to its essential role in life process, nitrogen (N) uptake and metabolism is precisely regulated in all kinds of life organisms. The regulation of N uptake and metabolism depends on the sensing of internal and external N signals. In the past decades, much knowledge has been acquired in this aspect in bacteria and fungi. In plants, however, the progress is relatively slow and the knowledge about N signals is scare. In this review, the major component in N signal systems in bacteria, fungi and plants were compared so as to provide new insight for N signal research in pant systems.

#### Keywords:

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