

The Diverse Faces of *Bacillus cereus*

Edited by Vincenzo Savini

The Diverse Faces of Bacillus cereus elucidates salient characteristics of this microorganism, from its environmental and ecologic relevance, to its veterinary involvement and its medical aspects, the latter including several and diverse syndromes such as the most common *Bacillus cereus*-associated foodborne poisoning and the less frequent airway disease mimicking anthrax.

Bacillus cereus has an almost ubiquitous environmental distribution and may cause serious, even fatal, human diseases as well. The bacterium, nevertheless, is also used as a biocontrol agent to face microorganism-related vegetable decay due to its natural antimicrobial properties.

Once considered as a mere colonizer or contaminant, in fact, *Bacillus cereus* is nowadays acquiring increasing importance both as an agent of infections and as an organism of biotechnological and agricultural interest. Also, researchers, clinicians, and students alike will benefit from this clear compendium on the phenotype-based and molecular techniques and procedures that may be adopted or followed to correctly identify this intriguing multi-faceted microorganism.

Key Features:

- Presents an update on the current aspects of *Bacillus cereus* and provides a concise compendium on the recent literature concerning this organism
- Sheds a light on human diseases by *Bacillus cereus*, with special reference to food poisoning and the anthrax-like lung infection it causes
- Describes the position of *Bacillus cereus* in the natural environment, with particular reference to its intrinsic antimicrobial activity
- Emphasizes the role *Bacillus cereus* may play as a veterinary pathogen, particularly as an agent of mastitis
- Gives an overview of this organism's biotechnological applications as a natural pesticide in agriculture
- Discusses the importance of *Bacillus thuringiensis*, a member of the *Bacillus cereus* group, as a natural insecticide facing virus-harboring mosquitoes

Picture credit: Images on the cover are by Vincenzo Savini. Main picture has been taken at San Domenico Lake, Villalago (AQ), Italy. Images of the microorganisms have been taken at the Civic Hospital of Pescara, Italy, and are explained in the text.



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