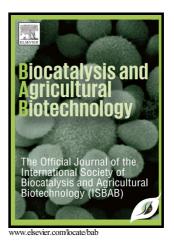
### Author's Accepted Manuscript

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#### ACCEPTED MANUSCRIPT

## **Biotransformation and biodegradation of methyl parathion** by Brazilian bacterial strains isolated from mangrove peat

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#### **Highlights**

- Bacterial strains catalyzed the biotransformation of methyl parathion after 24 h.
- Biodegradation occurred through the hydrolysis of ester bond by phase I reaction.
- Biotransformation occurred by reduction of nitro group followed by acetylation of the amino group.
- Selected strains were able to reduce *p*-nitrophenol levels by phase II reaction.

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