

RESUMENES

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***Azospirillum brasilense* mutant affected in motility, nitrogen fixation, flocculation and exopolysaccharide (EPS) production**

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ABSTRACT

Members of genus *Azospirillum* are capable of nitrogen fixation under microaerophilic conditions in association with the roots of several grasses. capsular and exocellular polysaccharides (PS), are responsible for the binding of Congo red dye to *Azospirillum* cells. the PS are also involved in formation of cellular aggregates. Tn5 ϵ usA was used to generate an *Azospirillum brasilense* UAP 154/6-51 mutant, was analyzed in activity of β -glucuronidase. The cell surface of the mutant was unable to bind Congo red dye (white), and was unable to cell aggregation (flocculation), it is not capable nitrogen fixing and does not demonstrate any motility. The present paper describe these phenotype differences and demonstrates that a single mutational event is involved, that is it a pleiotrophic mutant.