

## 1-Amino-3-methylcyclobutane carboxylic acid in Seeds of *Ateleia glazioviana* Baillon (*Leguminosae*)

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**SUMMARY.** The structure of a novel nonprotein amino acid isolated from the seeds of *Ateleia glazioviana* Baillon was established as 1-amino-3-methylcyclobutane carboxylic acid on basis of spectroscopic evidences. For the isolation, the ethanol-water extract was successively extracted with dichloromethane, ethyl acetate and n-butano. Thereafter, the amino acids were separated from the remaining water phase using a cation-exchange resin column and further submitted to column chromatography on silica gel to yield 80 mg (0,02%) of the new amino acid.

**RESUMEN.** "Acido 1-amino-3-metilciclobutano carboxílico en Semillas de *Ateleia glazioviana* Baillon (*Leguminosae*)". Un nuevo aminoácido del tipo no proteico, el ácido 1-amino-3-metilciclobutano carboxílico, fue aislado de las semillas de *Ateleia glazioviana* Baill. extraídas con etanol 50%. El extracto alcohólico, después de ser purificado por extracción sucesiva con diclorometano, acetato de etilo y n-butanol, fue fraccionado en una columna con resina de intercambio iónico. La separación final fue realizada por CC con sílica gel, con un rendimiento final de 0,02%. La estructura química fue establecida a través de IR, EIMS de alta resolución y <sup>13</sup>C y <sup>1</sup>H-RMN.

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### INTRODUCTION

*Ateleia glazioviana* is a native tree of Rio Grande do Sul, Brazil. It is popularly known as "timbó" and it has been reported to be toxic to cattle and fish and repellent to home insects<sup>1</sup>. In previous work, the ichthyotoxic activity of the aqueous extracts of leaves could be proven<sup>2</sup>; the dichloromethane and the amino acid fractions of the aqueous extract were shown to be responsible for the abortions or reabsorptions of foetuses in female rats<sup>3</sup>. When leaves of *Ateleia glazio-*

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**KEY WORDS:** 1-amino-3-methylcyclobutane Carboxylic Acid, *Ateleia glazioviana*, *Leguminosae*, Nonprotein amino acid, "Timbó".

**PALABRAS CLAVE:** Acido 1-amino-3-metilciclobutano carboxílico, Aminoácido no proteico, *Ateleia glazioviana*, *Leguminosae*, "Timbó".