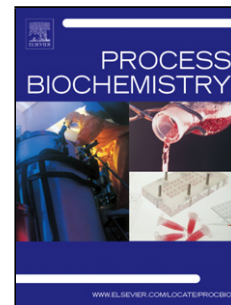


Accepted Manuscript

Title: A trypsin inhibitor purified from *Cassia leiandra* seeds has insecticidal activity against *Aedes aegypti*

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PII: S1359-5113(16)30421-4
DOI: <http://dx.doi.org/doi:10.1016/j.procbio.2017.03.015>
Reference: PRBI 10974

To appear in: *Process Biochemistry*

Received date: 15-9-2016
Revised date: 8-3-2017
Accepted date: 19-3-2017

Please cite this article as: Dias LP, Oliveira JTA, Rocha-Bezerra LCB, Sousa DOB, Costa HPS, Araujo NMS, Carvalho AFU, Tabosa PMS, Monteiro-Moreira ACO, Lobo MDP, Moreno FBMB, Rocha BAM, Lopes JLS, Beltramini LM, Vasconcelos IM, A trypsin inhibitor purified from *Cassia leiandra* seeds has insecticidal activity against *Aedes aegypti*, *Process Biochemistry* (2017), <http://dx.doi.org/10.1016/j.procbio.2017.03.015>

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1 **Highlights**

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3 • This is the first study on the purification of *Cassia leiandra* trypsin inhibitor (*CITI*)

4 • *CITI* is a Kunitz-type inhibitor composed of a single 19,484 Da polypeptide chain

5 • *CITI* is an uncompetitive inhibitor with a K_i of 6.25×10^{-8} M

6 • *CITI* inhibits *Aedes aegypti* larval midgut proteases

7 • *CITI* impairs the survival and larval cycle of *Aedes aegypti* (LC_{50} of 2.28×10^{-2} M)

8

9 A trypsin inhibitor purified from *Cassia leiandra* seeds has insecticidal activity against

10 *Aedes aegypti*

11

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