

The potential of *Burkholderia thailandensis* E264 for co-valorization of lignocellulose-based sugars to multiple value-added bio-products

Warren Blunt^{a,b*}, Catherine Blanchard^a, Christopher Doyle^a, Vinicio Vasquez^a, Mengwei Ye^a, Peter Adewale^c, Yali Liu^a, Krista Morley^a, and Fanny Monteil-Rivera^{a*}

^aAquatic and Crop Resource Development Research Centre, National Research Council of Canada, 6100 Royalmount Ave., Montreal, Quebec, Canada, H4P 2R2

^b New address: Department of Biosystems Engineering, University of Manitoba (Fort Garry campus), 75 Chancellors Circle, Winnipeg, MB, Canada, R3T 5V6

^cAquatic and Crop Resource Development Research Centre, National Research Council of Canada, 100 Sussex Drive, Ottawa, Ontario, Canada, K1A 0R6

*Author to whom correspondence should be addressed

Author emails: Warren.Blunt@umanitoba.ca; Catherine.Blanchard@cnrc-nrc.gc.ca; Christopher.Doyle@cnrc-nrc.gc.ca; Vinicio.Vasquez@cnrc-nrc.gc.ca; MengWei.Ye@cnrc-nrc.gc.ca; Peter.Adewale@nrc-cnrc.gc.ca; Yali.Liu@cnrc-nrc.gc.ca; Krista.Morley@cnrc-nrc.gc.ca; Fanny.Monteil-Rivera@cnrc-nrc.gc.ca

Supplementary Information

Supplementary Figures

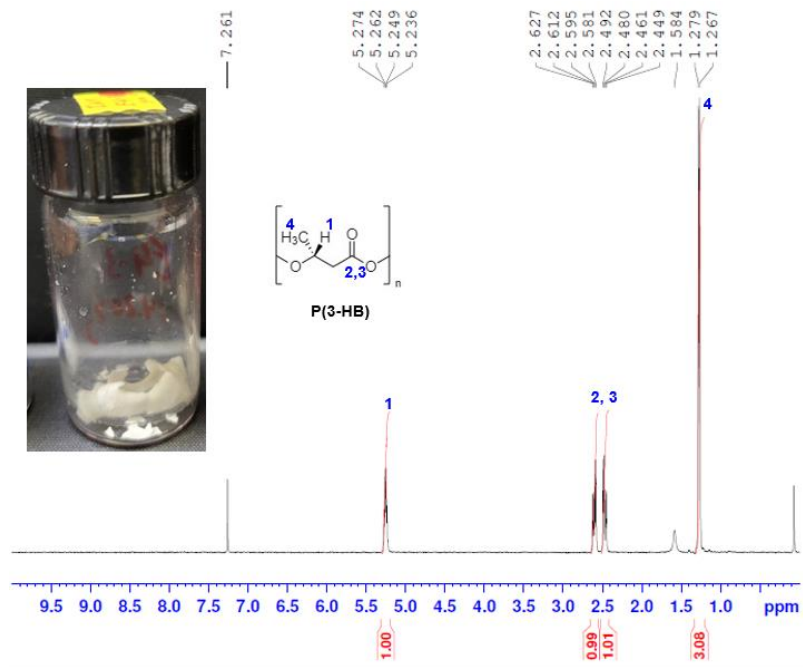


Figure S1. ¹H-NMR spectra for purified poly(3-HB) synthesized by *B. thailandensis* when grown on a 3:1 glucose-xylose mixture

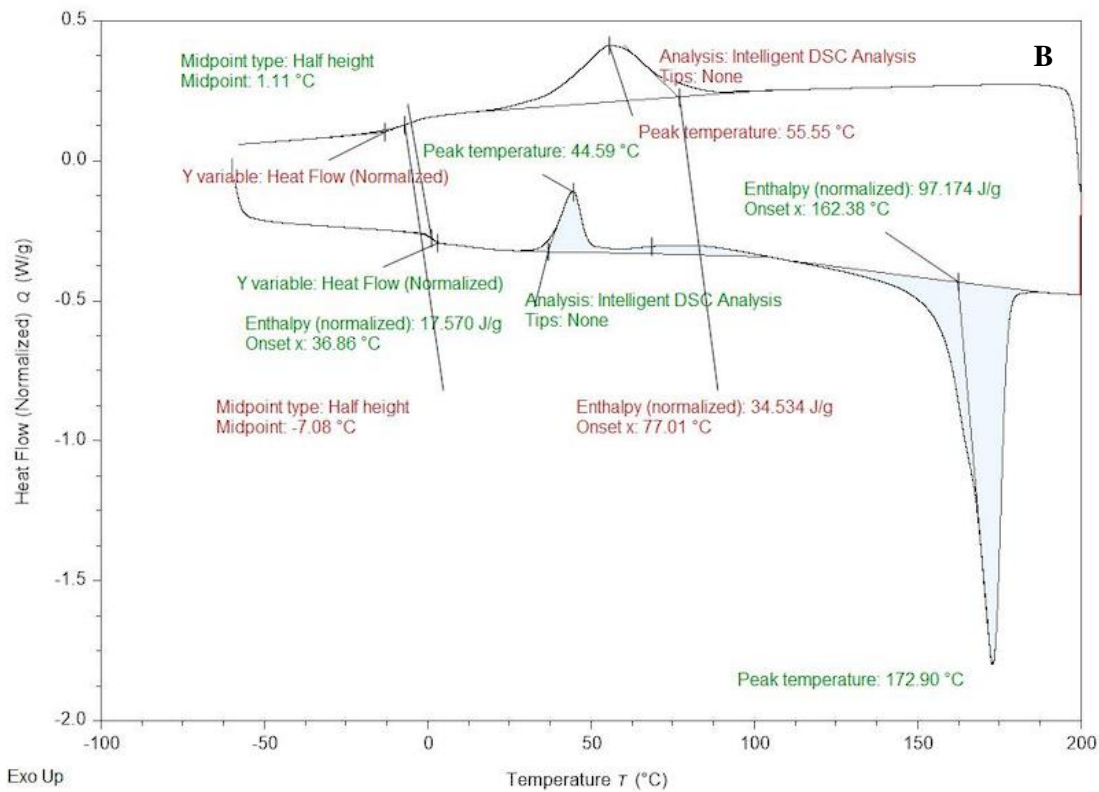
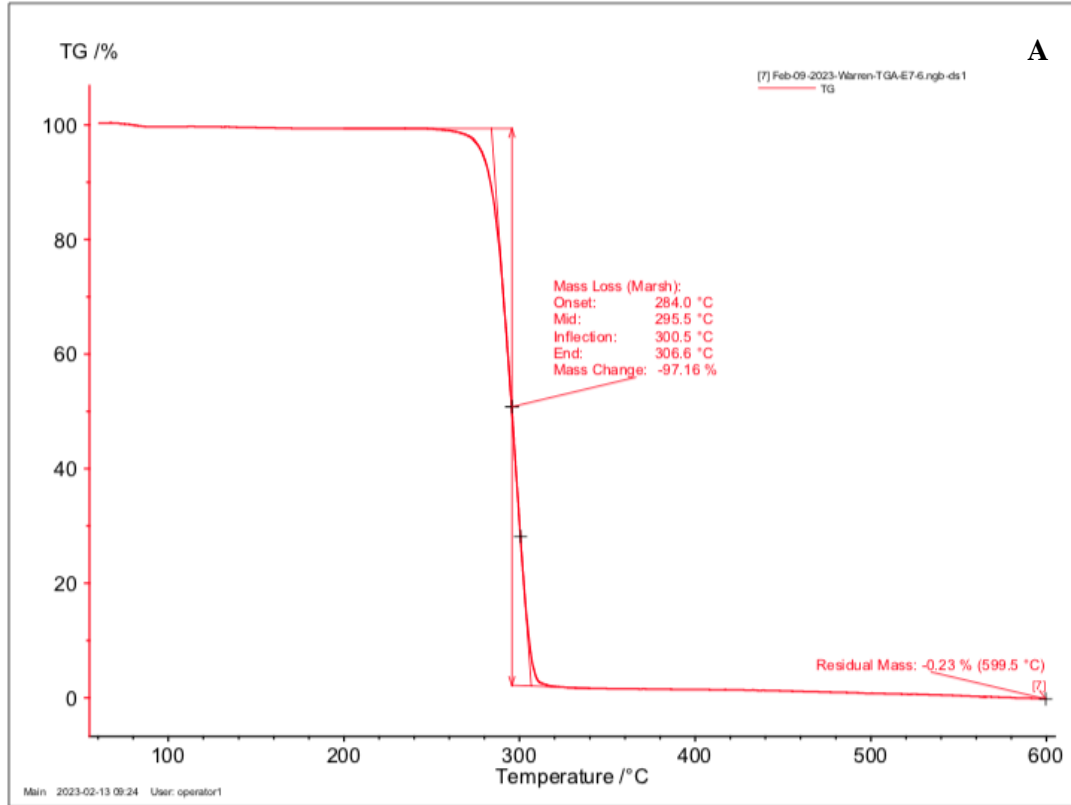


Figure S2. Thermograms for purified PHB synthesized from a 3:1 glucose-xylose mixture using *B. thailandensis* E264 produced by A) TGA and B) DSC analyses

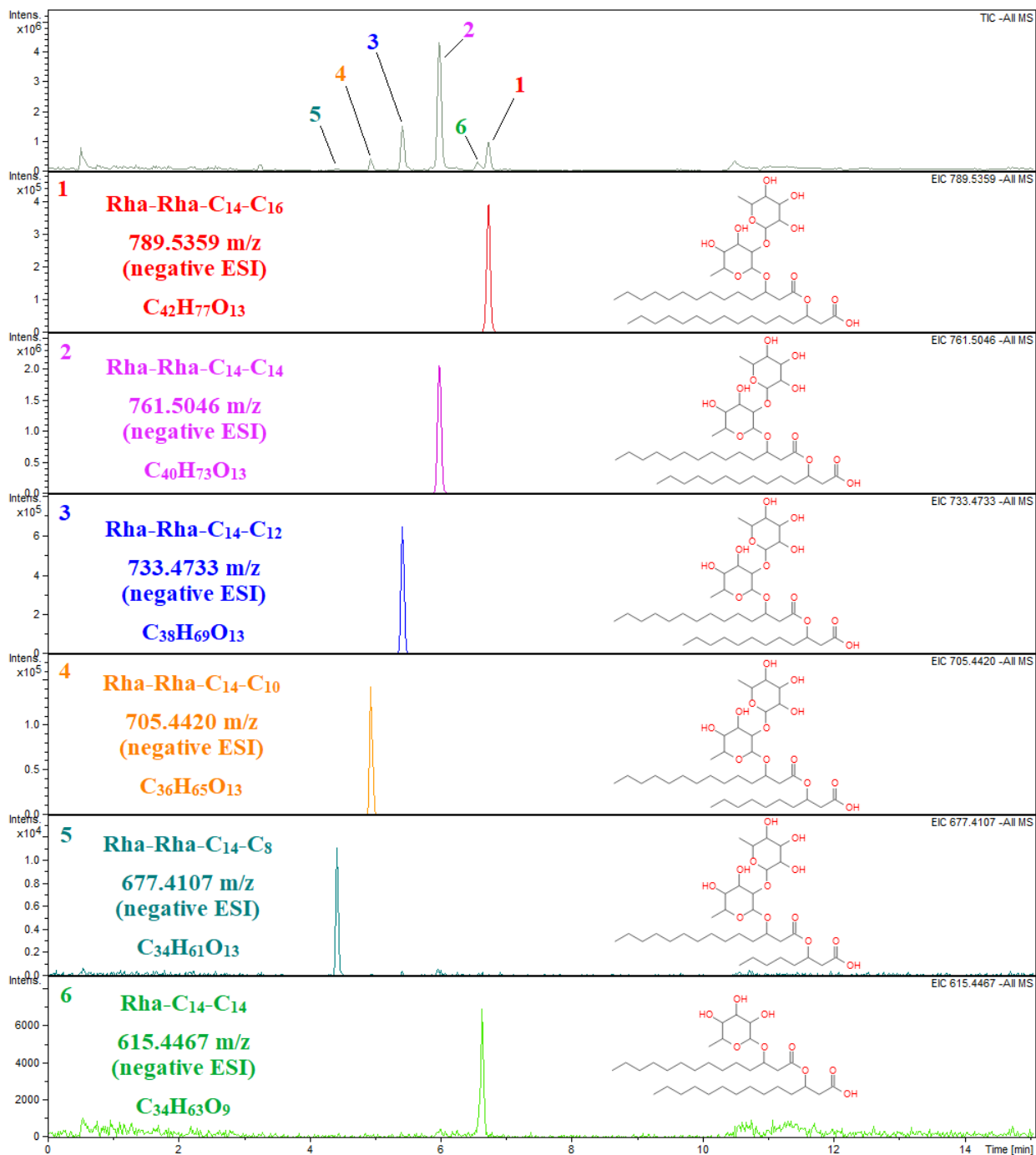


Figure S3. Total Ion chromatogram (top panel) and Extracted mass chromatograms (six panels below) of purified extract produced by *B. thailandensis* grown on glycerol for 216 h