

## Supplementary materials

# Renewable Poly(Lactic Acid)Lignocellulose Biocomposites for the Enhancement of the Water Retention Capacity of the Soil

Dalila Rubicela Cruz Fabian <sup>1,\*</sup>, Silvie Durpekova <sup>1,\*</sup>, Miroslava Dusankova <sup>1</sup>, Jaroslav Cisar <sup>1</sup>, Petra Drohsler <sup>1</sup>, Ondrej Elich <sup>2</sup>, Marketa Borkova <sup>2</sup>, Jarmila Cechmankova <sup>3</sup> and Vladimir Sedlarik <sup>1</sup>

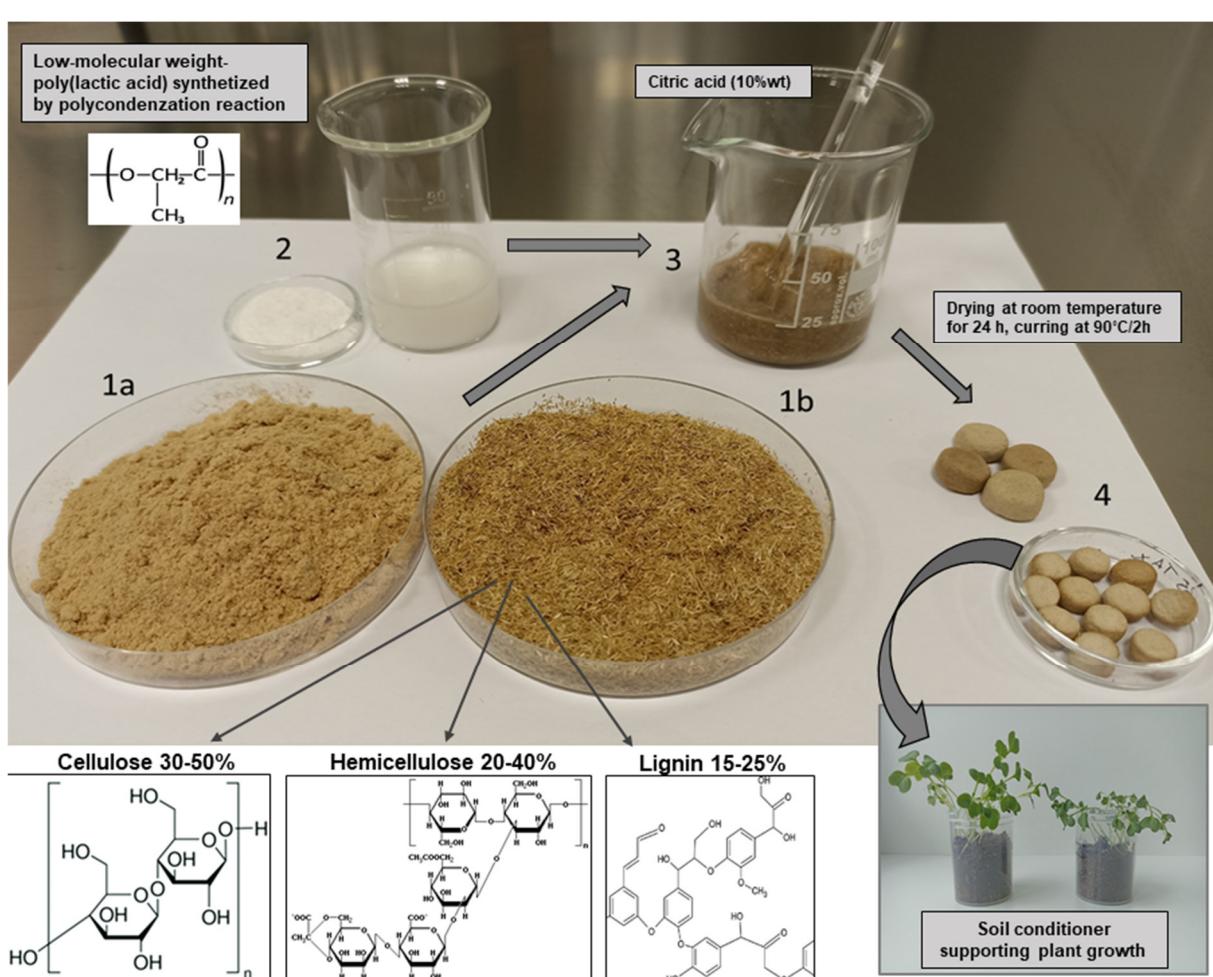
<sup>1</sup> Centre of Polymer Systems, University Institute, Tomas Bata University in Zlin, Tr. T. Bati 5678,

760 01 Zlin, Czech Republic; cruz\_fabian@utb.cz (D.R.C.F.); dusankova@utb.cz (M.D.); jcisar@utb.cz (J.C.); pvalkova@utb.cz (P.D.); sedlarik@utb.cz (V.S.)

<sup>2</sup> Dairy Research Institute, Ke Dvoru 12a, 160 00 Prague, Czech Republic; elich@vumlekarensky.cz (O.E.); borkova@milcom-as.cz (M.B.)

<sup>3</sup> Research Institute for Soil and Water Conservation, Zabovreska 250, 15627 Prague, Czech Republic; cehmankova.jarmila@vumop.cz

\* Correspondence: durpekova@utb.cz



**Figure S1.** Schematic procedure of the sample preparation; 1a) wood sawdust, 1b) milled wheat straw, 2) dissolution of PLA in acetone to obtain 10% w/v solution, 3) addition of the relevant amount of residual biomass into PLA/citric acid solution, 4) dried PLA/WS(SD) samples after curing at 90°C.

Control

A



B



C



**Figure S2.** Visual changes of biodegradation of the PLA-WS biocomposites in soil: (A) WS15, (B) WS35, (C) WS60, during 10, 20 and 40 days, resp.