

Cytocompatible cellulose nanofibers from invasive plant species *Agave americana* L. and *Ricinus communis* L.: a renewable green source of highly crystalline nanocellulose

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This Supplementary Material has 2 pages, including 2 Figures and 1 Table.

The morphological analysis of the *Agave Americana* L. fibers collected from the Canary Islands is presented in Figure S1. The SEM images of the fibers showed two different morphologies. One part of the fibers has a layered structure, while the other part corresponds to a network of microfibrils tightly packed together and covered with some outer layer. The average diameter of the fibrils is about 2.2 μm . The ribbon-shaped fibrils have a spiral appearance. The EDX analysis of the whole region of the **raw_AA** sample showed similar elemental composition containing several minerals commonly found in soil (e.g., potassium and calcium, see Fig S1). It was also found that this sample was very beam sensitive. In particular, the fibers were melted and destroyed under the electron beam (15 kV).

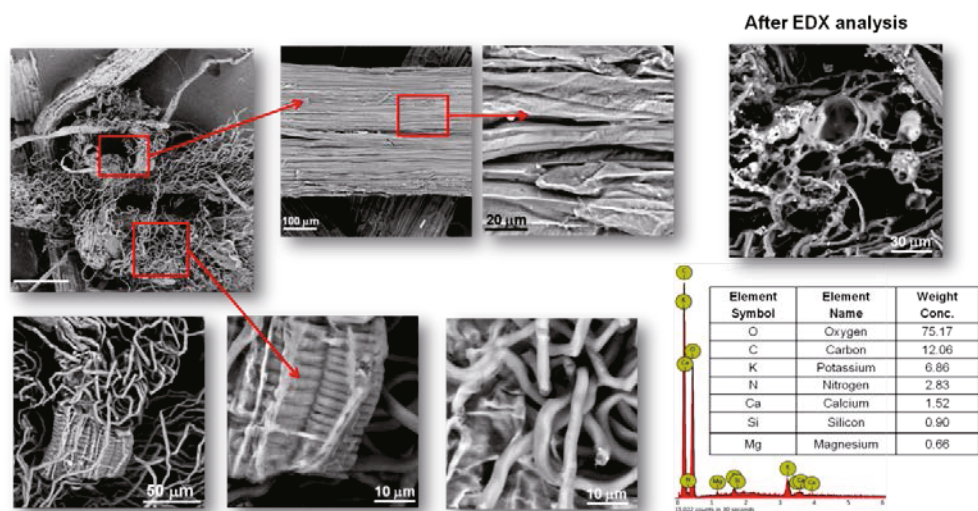


Fig. S1 SEM images of raw *Agave Americana* L. together with EDX analysis.

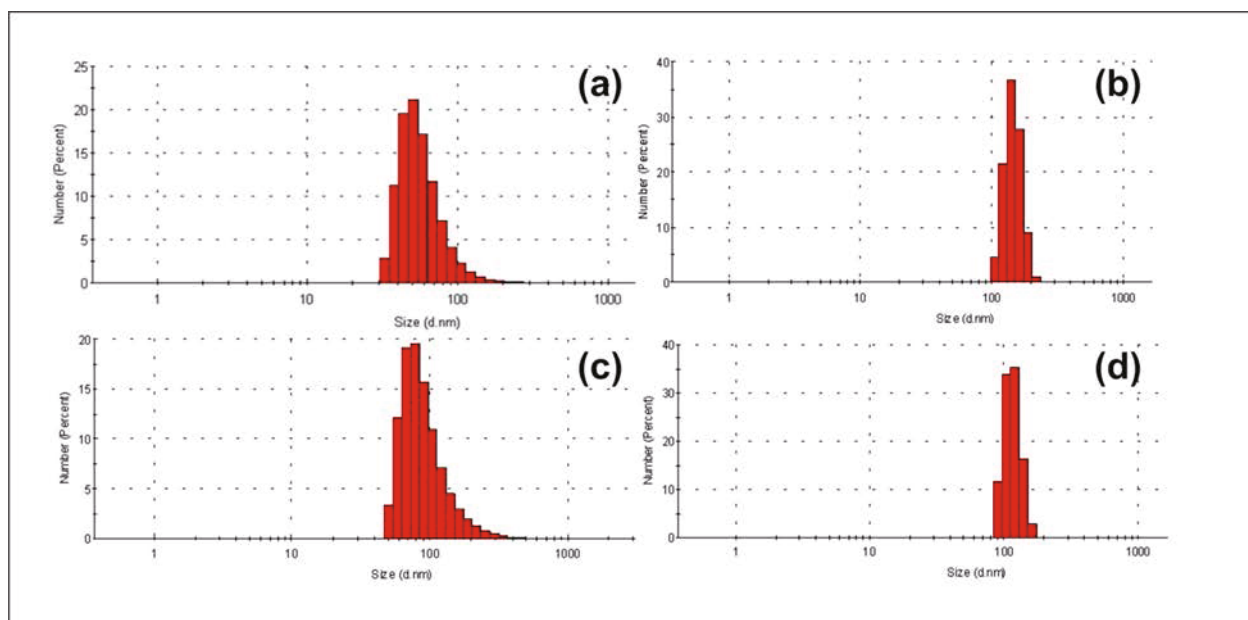


Fig. S2 Size distribution of the cellulose nanofiber samples obtained by DLS with the averaged number: (a) CNFAA1, (b) CNFAA2, (c) CNFRC1 and (d) CNFRC2

The zeta potential data of the studied cellulose nanofiber samples in diluted aqueous suspensions are shown in Table S1.

Table S1 Zeta potential data

Sample name	Zeta-potential (mV)
raw_AA	n/a
CNFAA1	-53.4 ± 1.6
CNFAA2	-49.9 ± 1.8
raw_RC	n/a
CNFRC1	- 56.5 ± 2.0
CNFRC2	- 40.0 ± 3.8