Article

CuZn and ZnO Nanoflowers as Nano-Fungicides against *Botrytis cinerea* and *Sclerotinia sclerotiorum:* Phytoprotection, Translocation, and Impact after Foliar Application

Panagiota Tryfon [1], **Nathalie N. Kamou** [2], **Stefanos Mourdikoudis** [3,4], **Katerina Karamanoli** [5], **Urania Menkissoglu-Spiroudi** [2,*] **and Catherine Dendrinou-Samara** [1,*]

[1] Laboratory of Inorganic Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece; tryfon.giota@gmail.com
[2] Pesticide Science Laboratory, School of Agriculture, Faculty of Agriculture Forestry and Natural Environment, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece; nnkamou@gmail.com
[3] Biophysics Group, Department of Physics and Astronomy, University College London, London WC1E 6BT, UK
[4] UCL Healthcare Biomagnetics and Nanomaterials Laboratories, 21 Albemarle Street, London W1S 4BS, UK; s.mourdikoudis@ucl.ac.uk
[5] Laboratory of Agricultural Chemistry, Faculty of Agriculture, Forestry and Natural Environment, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece; katkar@auth.gr
[*] Correspondence: rmenkis@agro.auth.gr (UM-S.); samkat@chem.auth.gr (C.D.-S.)
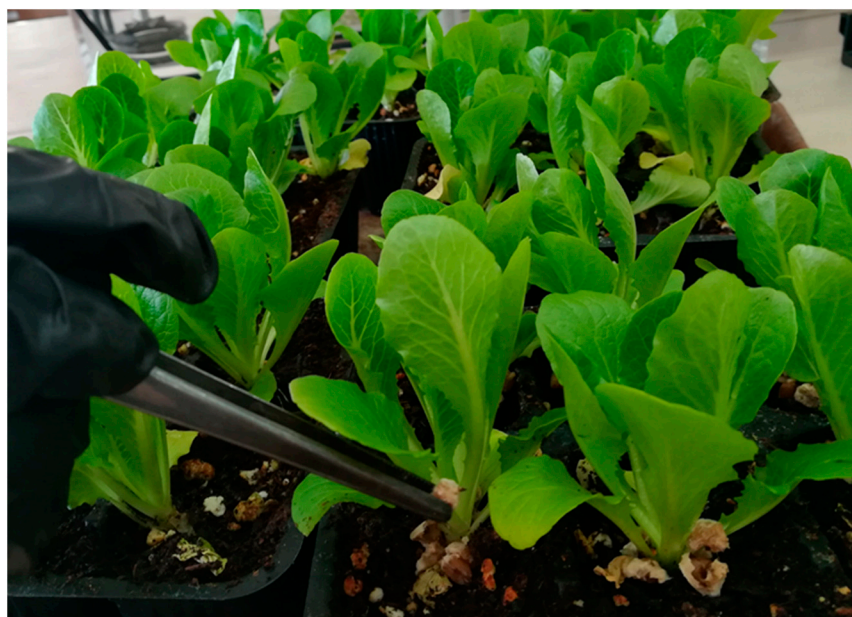
Figure S1. Wheat grains were putted around and next to the wounded stems of lettuce (*Lactuca sativa*) plants.
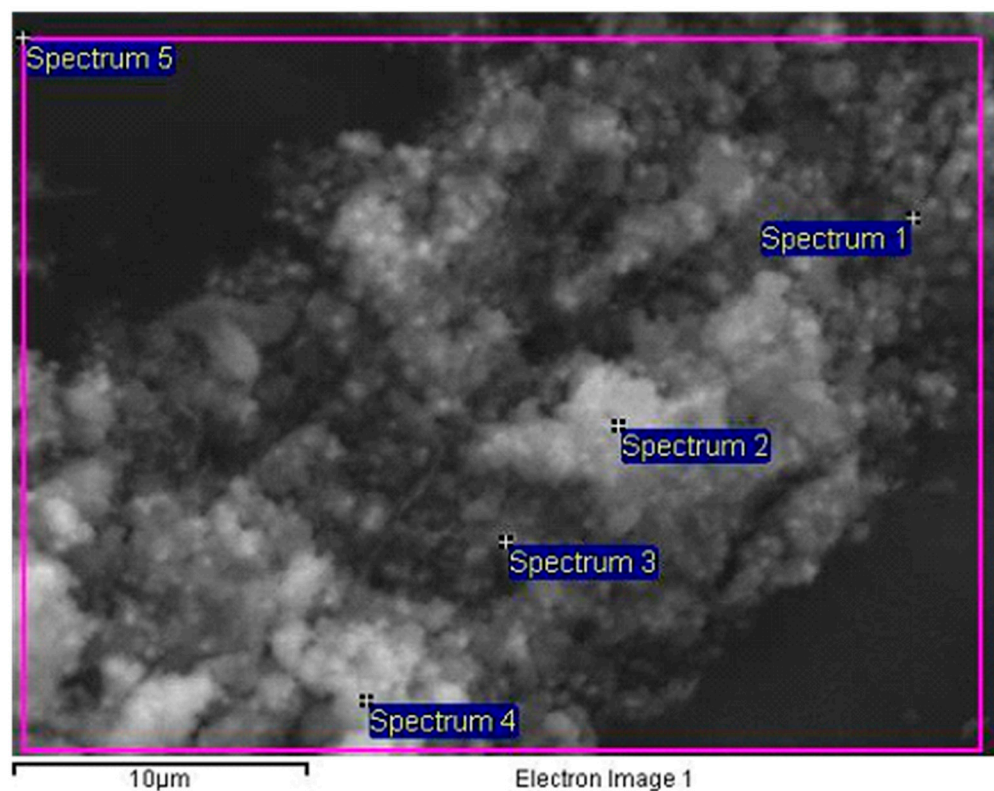
Figure S2. SEM image of the synthesized CuZn@DEG NFs with the five spectrum areas used for the calculation of the elemental composition by EDX.

Table S1. Elemental composition percentage of the CuZn@DEG NFs calculated by EDX for the spectrum areas shown in the SEM image (Figure S2).

| Spectrum	Cu	Zn
1	70.42%	29.58%
2	66.73%	33.27%
3	82.48%	17.52%
4	71.75%	28.25%
5	62.21%	37.79%
Mean	70.72%	29.28%
SD	7.55%	7.55
Max.	82.48%	37.79
Min.	62.21%	17.52

CuZn@DEG NPs

|			Size (d.nm):	% Intensity	Width (d.nm):
Z-Average (d.nm): 306.4	Peak 1:		190.9	100.0	38.80
PdI: 0.237	Peak 2:		0.000	0.0	0.000
Intercept: 0.904	Peak 3:		0.000	0.0	0.000
Result quality : Good					

Size Distribution by Intensity
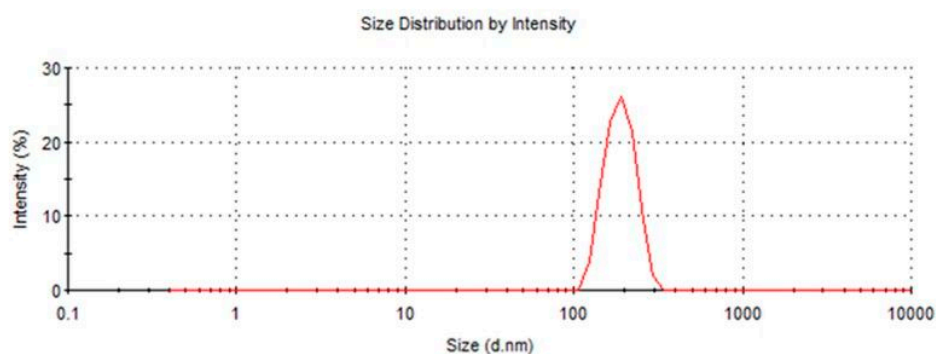
ZnO@PEG NPs

			Size (d.nm):	% Intensity	Width (d.nm):
Z-Average (d.nm): 338.0	Peak 1:		222.7	92.5	66.87
PdI: 0.402	Peak 2:		74.00	7.5	12.72
Intercept: 0.723	Peak 3:		0.000	0.0	0.000
Result quality : Good					

Size Distribution by Intensity
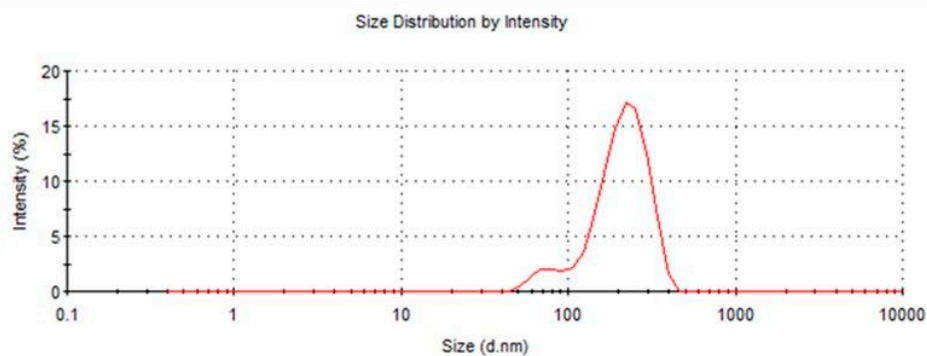
Figure S3. DLS measurements for CuZn@DEG and ZnO@PEG NFs.
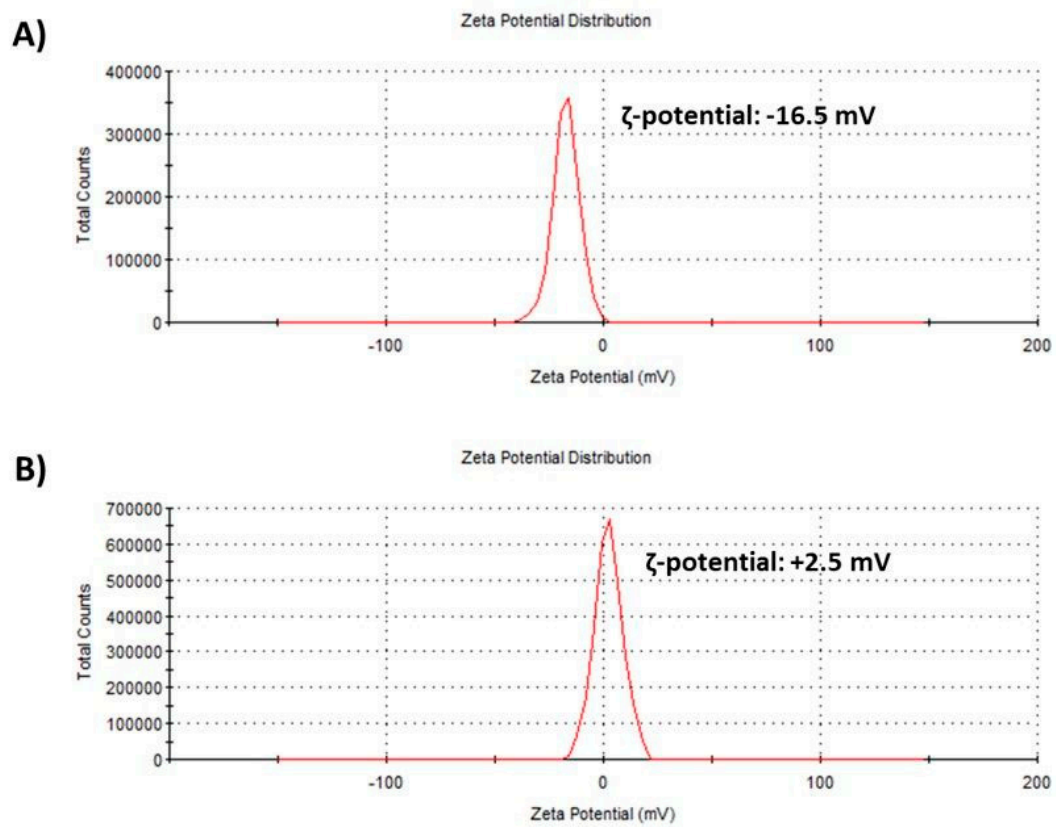
Figure S4. ζ-potential for CuZn@DEG (**A**) and ZnO@PEG (**B**) NFs.
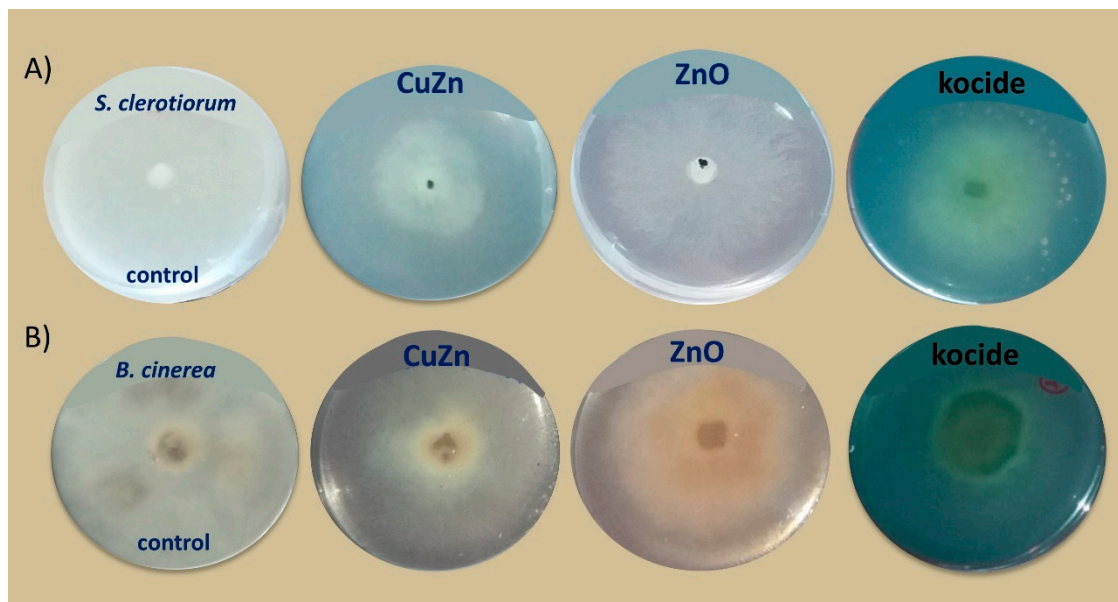
Figure S5. Growth inhibition of *S. sclerotiorum* after 72 h (**A**) and *B. cinerea* after 96 h (**B**) treated with CuZn@DEG NFs, ZnO@PEG NFs and KOCIDE 2000. .