Supporting Information

Carboxymethyl Chitosan Modified Carbon Nanoparticle for Controlled Emamectin Benzoate Delivery: Improved Solubility, pH-Responsive Release, and Sustainable Pest Control

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Figure S1. Photographs of EB@CMC@CNP at different concentrations ([EB]=10, 1, 0.1, 0.01, 0.001, and 0 mg/mL, order: left to right).
Figure S2. (a) Langmuir and (b) Freundlich isotherm model for EB adsorption on CMC@CNP.
**Figure S3.** Photograph of EB@CMC@CNPs at one-year storage period (left to right: 0, 2, 4, 6, 8, 10, 12 month).
Figure S4. Photographs of EB@CMC@CNP treated by (a) 0 °C for 7 d and (b) 54 °C for 14 d.
**Figure S5.** Photographs of EB@CMC@CNP in different water samples.
### Supplemental Table

Table S1. Isotherm parameters of Langmuir and Freundlich models.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Langmuir</th>
<th>Freundlich</th>
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<tr>
<td>K</td>
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<td>63.8</td>
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<tr>
<td>q_m</td>
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<td>n</td>
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<td>R^2</td>
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