Supporting Information

Red-emissive nitrogen doped carbon quantum dots for highly selective and sensitive fluorescent detection of alachlor herbicide in soil samples

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Figure S1 Effect of UV irradiation time on the fluorescence intensity of N-CQDs from 0 to 60 min. Here the concentration of N-CQDs was 0.2 mg mL$^{-1}$. 
Figure S2 Effect of storing time on the fluorescence intensity of N-CQDs at room temperature from 0 to 60 day. Here the concentration of N-CQDs was 0.2 mg mL\(^{-1}\).
Figure S3 FT-IR spectra of N-CQDs
Figure S4 (A) SEM image of N-CQDs particles for EDS; (B–D) EDS element mapping data of C, N, and O elements throughout N-CQDs particles.
Figure S5: The Stern-Volmer curves of alachlor quenched N-CQDs at different temperatures (277, 298 and 308 K).

(Here alachlor concentration was 5.0, 50, 250, and 500 nM, respectively.)
Figure S6 The UV-vis absorption spectra of N-CQDs in the presence of alachlor
(Here the concentration of N-CQDs was 0.1 mg/mL, and the concentration of alachlor (C_{paraquat})
from a to f was 0, 50, 100, 500, and 1000 nM, respectively)