Supporting Information

5-Sulfo anthranilic acid dithiocarbamate functionalized silver nanoparticles as colorimetric probe for simple and selective detection of tricyclazole fungicide in rice samples

Jigneshkumar V. Rohit and Suresh Kumar Kailasa*

Department of Applied Chemistry, S. V. National Institute of Technology, Surat-395 007, India

*Corresponding author; Phone: +91-261-2201730; Fax: +91-261-2227334
E-mail: sureshkumarchem@gmail.com

Figure S1. (a) Schematic representation for preparation of SAADTC-Ag NPs and (b) UV-visible absorbance spectra of bare Ag NPs and SAADTC-Ag NPs. Inset: photograph of bare Ag NPs and SAADTC-Ag NPs.
Figure S2. UV-visible absorbance spectra of (a) bare Ag NPs and (b) SAADTC-Ag NPs at different time intervals.
Figure S3. FT-IR spectra of (a) SAA, (b) SAADTC and (c) SAADTC-Ag NPs
Figure S4. $^1$H NMR spectra of (a) SAA and (b) SAADTC
Figure S5. Structure of pesticides (hexaconazole, propiconazole, tebuconazole, defenoconazole and tricyclazole) which are used for selectivity study using SAADTC- Ag NPs as colorimetric probe.
Figure S6. (a) UV-visible absorbance spectra and (b) photograph of (i) SAADTC-Ag NPs, SAADTC-Ag NPs with (ii) aniline, (iii) p-nitro aniline, (iv) L-phenylalanine, (v) glycine, (vi) N-methyl aniline, (vii) L-proline, (viii) uracil, (ix) N-N dimethyl aniline, (x) 2-2’ bipyridine, (xi) N-hydroxy succinimide, (xii) imipramine and (xiii) tricyclazole (100 µM)
Figure S7. (a) UV-visible absorbance spectra and (b) photograph of SAADTC-Ag NPs, SAADTC-Ag NPs with various metal ions (Na⁺, K⁺, Cu²⁺, Zn²⁺, Cd²⁺, Fe²⁺, Mn²⁺, Mg²⁺, Co²⁺, Pb²⁺, Hg²⁺, Ni²⁺, Ca²⁺, Ba²⁺, Cr³⁺, Fe³⁺, Al³⁺; 100 µM) and tricyclazole (100 µM)
Figure S8. (a) UV-visible absorbance spectra and (b) photograph of (i) SAADTC-Ag NPs (ii) SAADTC-Ag NPs in the presence of other interfering pesticides (hexaconazole, propiconazole, tebuconazole, defenoconazole, 1.2 mM) without tricyclazole, SAADTC-Ag NPs with tricyclazole in presence of other pesticides at (iii) 1:1 (100 µM:100 µM), (iv) 1:2 (100 µM:200 µM), (v) 1:4 (100 µM:400 µM), (vi) 1:6 (100 µM:600 µM), (vii) 1:8 (100 µM:800 µM), (viii) 1:10 (100 µM:1000 µM), (ix) 1:12 (100 µM:1200 µM), (x) SAADTC-Ag NPs with tricyclazole (100 µM).