

**Supplement information**

**A mix-and-detect method based on colloid gold  
immunochromatographic assay for on-site detection of  
zearalenone in edible oils**

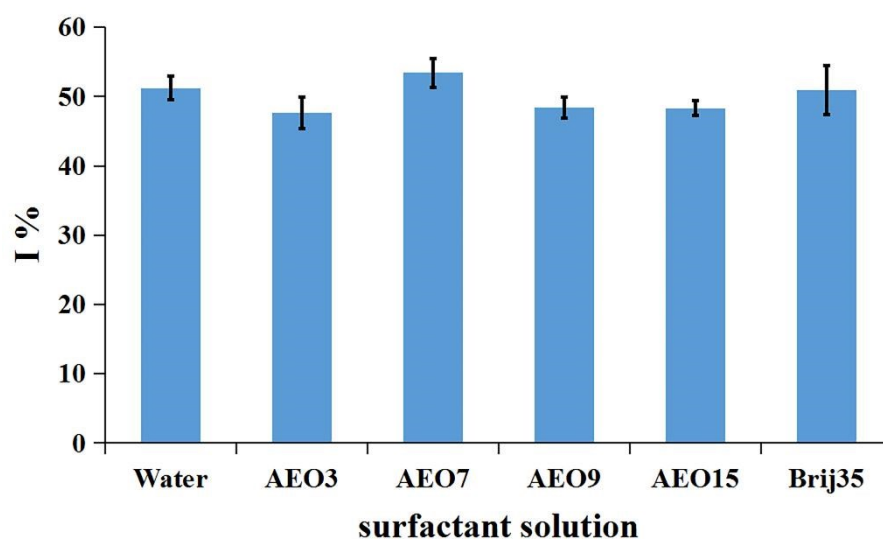
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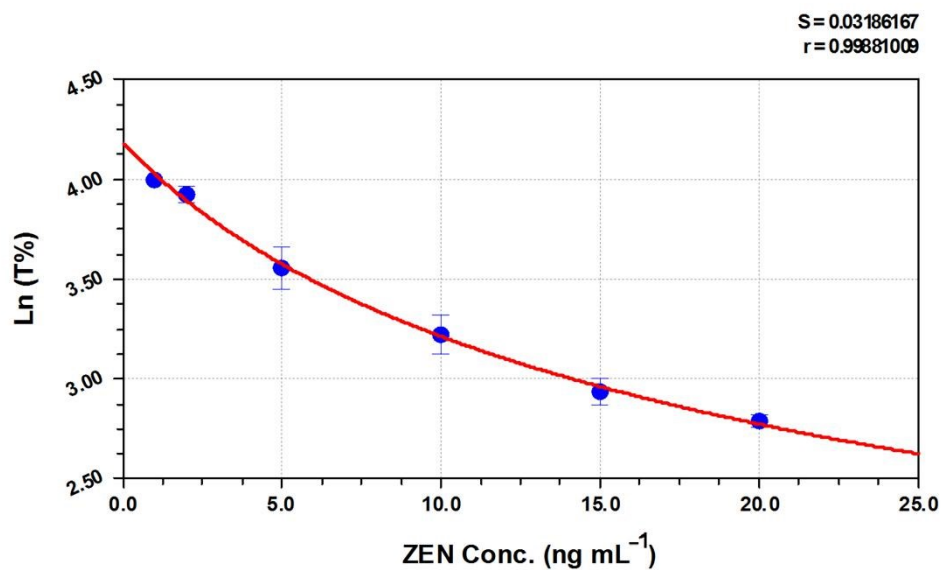
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13 **Fig. S1** The effect of surfactant on I%. ZEN was added to water and 0.5% AEO  
 14 surfactant solution respectively to make the final concentration  $1 \text{ ng mL}^{-1}$ . Then, 80  
 15  $\mu\text{L}$  of ZEN-free and ZEN-containing water, ZEN-free and ZEN-containing surfactant  
 16 solutions were dropped to the test card. I% was calculated according to the method in  
 17 Section 2.5 of the paper.



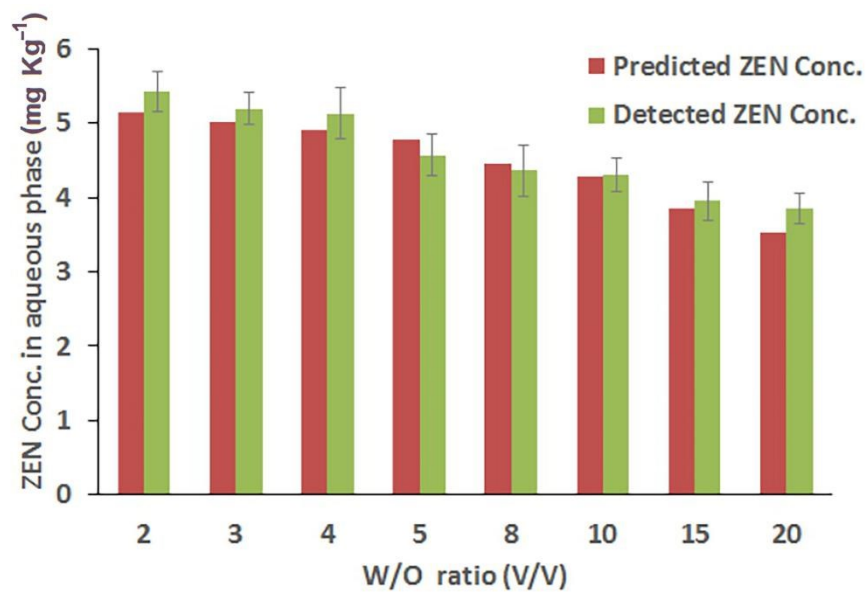
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19 **Fig. S2** Standard curve for determination of ZEN in 2mg mL<sup>-1</sup> of AEO 15

20 solution. The standard curve was based on Bleasdale model and the curve equation is

21  $y = (a + bx)^{-1/C}$ , in which  $a = 0.0154$ ,  $b = 1.77 \times 10^{-3}$ ,  $C = 2.92$ ,  $x$  is the concentration of

22 ZEN in 2mg mL<sup>-1</sup> of AEO 15 solution,  $y$  is Ln(T%).



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24 **Fig. S3** Predicted ZEN concentration by using calculated k value and detected ZEN

25 concentration by using the colloidal gold immunochromatographic strips in aqueous

26 phase at different W/O ratio.