

## **Supporting Information**

Article

### **Rapid Identification and Analysis of Ochratoxin-A in Food and Agricultural Soil Samples Using a Novel Semi-Automated In-Syringe Based Fast Mycotoxin Extraction (FaMEx) Technique Coupled with UHPLC-MS/MS**

**Karthikeyan Prakasham <sup>1</sup>, Swapnil Gurrani <sup>1</sup>, Jentaie Shiea <sup>1,2,3</sup>, Ming-Tsang Wu <sup>1,4</sup>, Chia-Fang Wu <sup>1,5</sup>, Yi-Jia Ku <sup>6</sup>, Tseng-Yu Tsai <sup>6</sup>, Hung-Ta Hua <sup>6</sup>, Yu-Jia Lin <sup>6</sup>, Po-Chin Huang <sup>1,7</sup>, Gangadhar Andaluri <sup>8</sup> and Vinoth Kumar Ponnusamy <sup>1,2,3,9,\*</sup>**

<sup>1</sup>Research Center for Precision Environmental Medicine, Kaohsiung Medical University (KMU), Kaohsiung City-807, Taiwan

<sup>2</sup>Department of Medicinal and Applied Chemistry, Kaohsiung Medical University (KMU), Kaohsiung City-807, Taiwan

<sup>3</sup>Department of Chemistry, National Sun Yat-Sen University, Kaohsiung City-804, Taiwan

<sup>4</sup>Department of Family Medicine, Kaohsiung Medical University Hospital, Kaohsiung Medical University (KMU), Kaohsiung City 807, Taiwan

<sup>5</sup>International Master Program of Translational Medicine, National United University, Miaoli, Taiwan

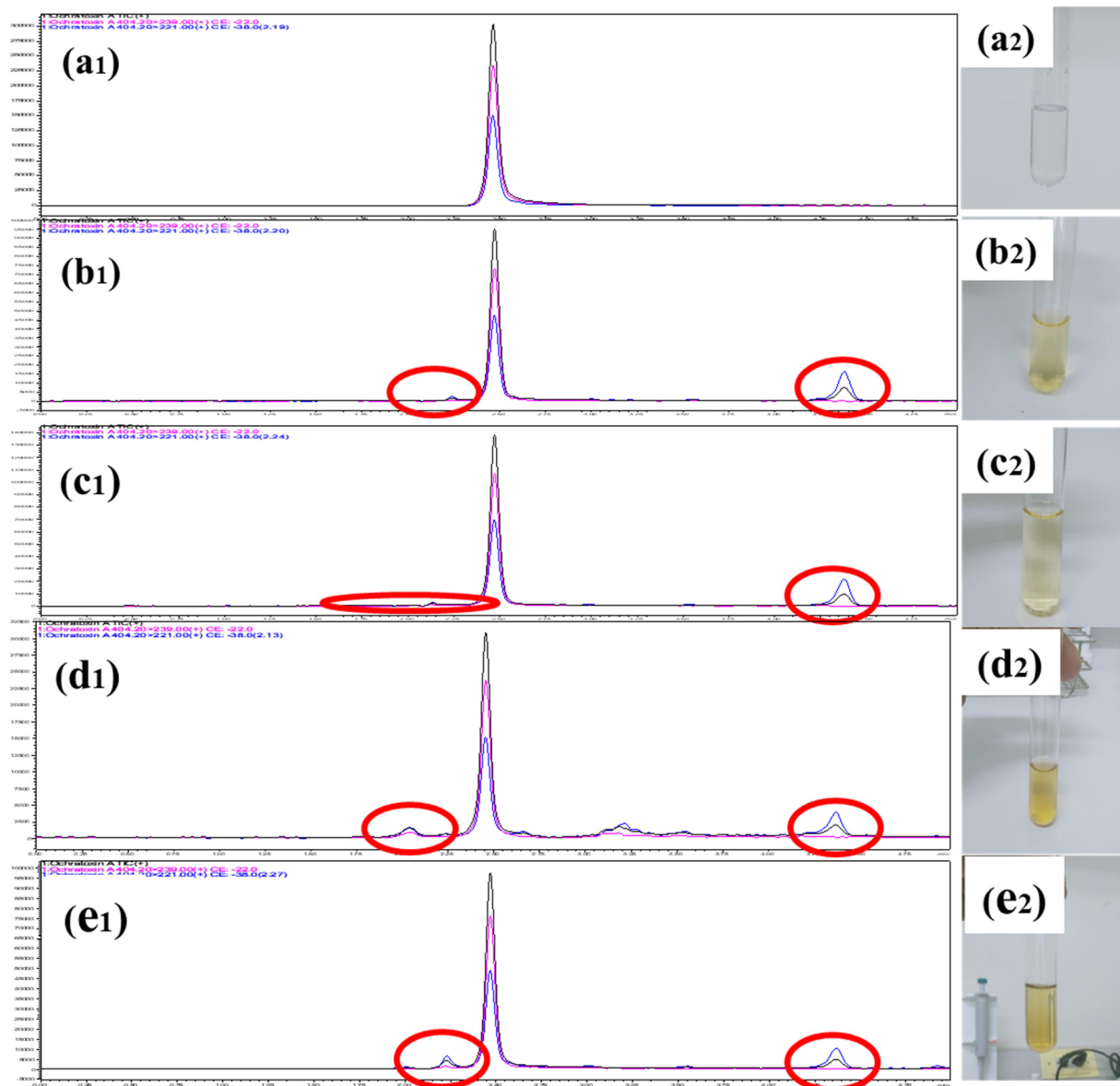
<sup>6</sup>Research and Development Center, Great Engineering Technology (GETECH) Corporation, No.392, Yucheng Rd., Zuoying District., Kaohsiung City, 813 Taiwan

<sup>7</sup>National Institute of Environmental Health Sciences, National Health Research Institutes (NHRI), Miaoli County 35053, Taiwan

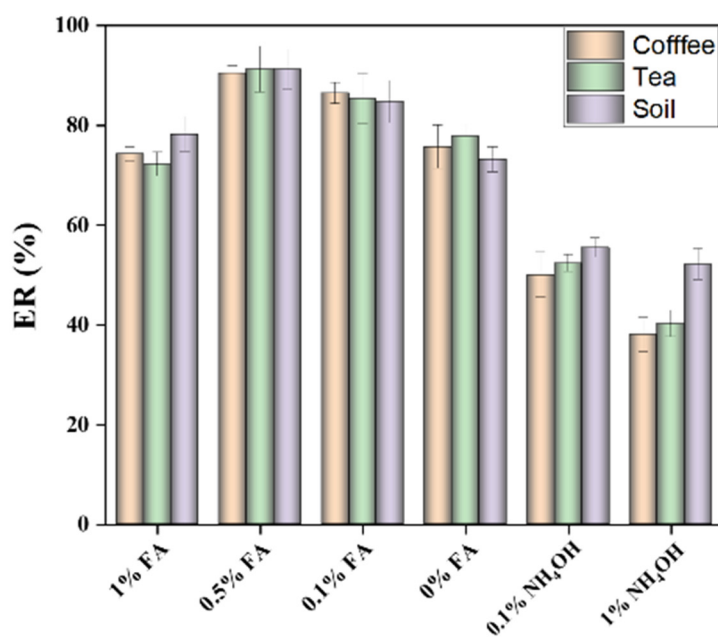
<sup>8</sup>Civil and Environmental Engineering Department, College of Engineering, Temple University, Philadelphia, United States

<sup>9</sup>Department of Medical Research, Kaohsiung Medical University Hospital (KMUH), Kaohsiung City-807, Taiwan

**\*Corresponding Authors' Email ID: kumar@kmu.edu.tw (Prof. Vinoth Kumar)**



**Figure S1,** (a1-e1) TIC Chromatogram of OTA extracted from coffee using acetonitrile, acetone, ethyl acetate, methanol, and isopropyl alcohol. (a2-e2) Color of coffee extracts from acetonitrile, acetone, ethyl acetate, methanol, and isopropyl alcohol.



**Figure S2:** Effect of various pH mediums for the extraction of Ochratoxin A from coffee, tea, and soil samples. Extraction conditions: 250 mg coffee, 2.0 mL solvent (under different pH conditions), 2.5 min of vortex extraction, and clean-up under the flow rate of 0.5ml/min using 1000 mg MgSO<sub>4</sub>, 75 mg AC and 50 mg C18 with three replicative analysis.