

# **A Novel, Rapid Screening Technique for Sugar Syrup Adulteration in Honey using Fluorescence Spectroscopy**

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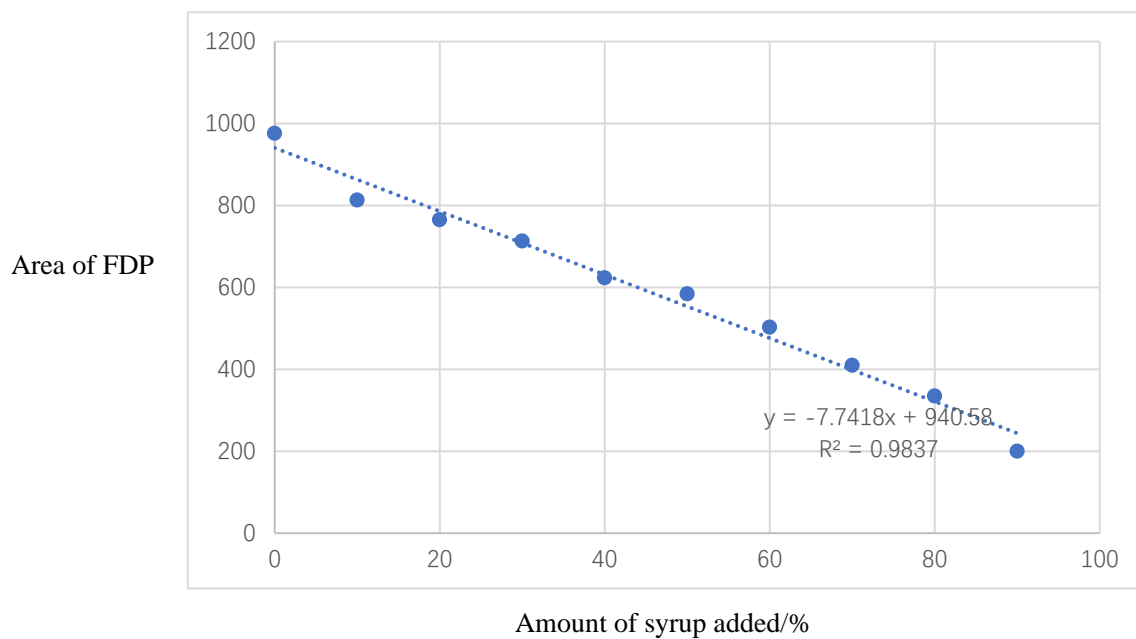
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**Figure S1.** The relationship of amount of syrup added and area of FDP

**Table S1.** Fluorescence Spectra Information of acacia honey samples

Source	Collection time	Fluorescence emission spectra		FDP
		Apex (nm)	Area $\pm$ RSD	Area $\pm$ RSD
Beijing	2019.06	470 $\pm$ 5	1899 $\pm$ 43.3	1086 $\pm$ 33.6 a
	2020.05	470 $\pm$ 3	1876 $\pm$ 30.2	1104 $\pm$ 25.8 a
	2020.06	470 $\pm$ 5	1920 $\pm$ 41.9	1072 $\pm$ 30.9 a
Shannxi	2019.06	470 $\pm$ 3	1893 $\pm$ 36.3	1181 $\pm$ 32.0 a
	2020.06	470 $\pm$ 5	1852 $\pm$ 48.1	1207 $\pm$ 16.7 a
	2021.06	470 $\pm$ 4	1901 $\pm$ 31.5	1226 $\pm$ 39.3 a
Shandong	2019.06	470 $\pm$ 5	1871 $\pm$ 50.6	1291 $\pm$ 40.1 a
	2020.06	470 $\pm$ 5	1876 $\pm$ 20.9	1208 $\pm$ 26.4 a
	2021.06	470 $\pm$ 6	1921 $\pm$ 53.6	1200 $\pm$ 38.8 a

Note: Lowercase letters indicate significant difference ( $p < 0.05$ )

**Table S2** The comparison of fluorescence spectra information from 3 different manufacturers

Manufacturer	Fluorescence emission spectra		FDP
	Apex (nm)	Area ratio (Acacia honey/Beet syrup)	Area ratio (Acacia honey/Beet syrup)
Hitachi F-4500	470 ± 3nm (Acacia honey)	0.58	32
	448 ± 4nm (Beet syrup)		
Shimadzu RF-5301PC	470 ± 3nm (Acacia honey)	0.60	32
	448 ± 4nm (Beet syrup)		
Lingguang F97	470 ± 3nm (Acacia honey)	0.58	31.5
	448 ± 4nm (Beet syrup)		