Table S1 Pesticide detection parameters of four fruits (68 pesticides)

| **Number** | **Pesticides** | **Main effect** | **ADI** **(mg/kg bw)** | **LOD (μg/kg)** |
| --- | --- | --- | --- | --- |
| 1 | Abamectin | Insecticide | 0.001 | 2.62 |
| 2 | Acephate | Insecticide | 0.03 | 0.95 |
| 3 | Acetamiprid | Insecticide | 0.07 | 0.085 |
| 4 | Aldicarb | Insecticide | 0.003 | 2.55 |
| 5 | Azoxystrobin | fungicide | 0.2 | 0.42 |
| 6 | Bifenthrin | Insecticide/Acaricide | 0.01 | 4.1 |
| 7 | Carbaryl | Insecticide | 0.008 | 0.06 |
| 8 | Carbendazim | fungicide | 0.03 | 1.05 |
| 9 | Carbofuran | Insecticide | 0.001 | 0.12 |
| 10 | Chlorantraniliprole | Insecticide | 2 | 0.37 |
| 11 | Chlorbenzuron | Insecticide | 1.25 | 0.54 |
| 12 | Chlorfenapyr | Insecticide | 0.03 | 0.22 |
| 13 | Chlorfluazuron | Insecticide | 0.005 | 2.75 |
| 14 | Chlorothalonil | fungicide | 0.02 | 2.65 |
| 15 | Chlorpyrifos | Insecticide | 0.01 | 0.24 |
| 16 | Cyfluthrin | Insecticide | 0.04 | 1.82 |
| 17 | Cyhalothrin | Insecticide | 0.02 | 2.11 |
| 18 | Cypermethrin | Insecticide | 0.02 | 2.45 |
| 19 | Cyromazine | Insecticide | 0.06 | 2.31 |
| 20 | Deltamethrin | Insecticide | 0.01 | 2.64 |
| 21 | Diazinon | Insecticide | 0.005 | 0.22 |
| 22 | Dichlorvos | Insecticide | 0.004 | 3 |
| 23 | Dicofol | Acaricide | 0.002 | 0.58 |
| 24 | Difenoconazole | fungicide | 0.01 | 0.25 |
| 25 | Diflubenzuron | Insecticide | 0.02 | 2.55 |
| 26 | Dimethoate | Insecticide | 0.002 | 0.46 |
| 27 | Dimethomorph | fungicide | 0.2 | 0.75 |
| 28 | Emamectin benzoate | Insecticide | 0.0005 | 0.075 |
| 29 | Etofenprox | Insecticide | 0.03 | 2.41 |
| 30 | Fenitrothion | Insecticide | 0.006 | 1.23 |
| 31 | Fenpropathrin | Insecticide | 0.03 | 2.15 |
| 32 | Fenvalerate | Insecticide | 0.02 | 2.35 |
| 33 | Fipronil | Insecticide | 0.0002 | 1.77 |
| 34 | Flucythrinate | Insecticide | 0.02 | 1.75 |
| 35 | Forchlorfenuron | Plant growth regulator | 0.07 | 0.85 |
| 36 | HCH | Insecticide | 0.005 | 0.5 |
| 37 | Imidacloprid | Insecticide | 0.06 | 0.7 |
| 38 | Iprodione | fungicide | 0.06 | 3.5 |
| 39 | Isocarbophos | Insecticide | 0.003 | 1.63 |
| 40 | Isofenphos-methyl | Insecticide | 0.003 | 2.12 |
| 41 | Malathion | Insecticide | 0.3 | 0.05 |
| 42 | Metalaxy | fungicide | 0.08 | 0.77 |
| 43 | Methamidophos | Insecticide | 0.004 | 0.95 |
| 44 | Methomyl | Insecticide | 0.02 | 2.65 |
| 45 | Omethoate | Insecticide | 0.0003 | 1.65 |
| 46 | Paclobutrazol | Plant growth regulator | 0.1 | 0.37 |
| 47 | Parathion | Insecticide | 0.004 | 2.11 |
| 48 | Parathion-methyl | Insecticide | 0.003 | 1.42 |
| 49 | Pendimethalin | herbicide | 0.1 | 2.23 |
| 50 | permethrin | Insecticide | 0.05 | 2.66 |
| 51 | Phorate | Insecticide | 0.0007 | 2.16 |
| 52 | Phosalone | Insecticide | 0.02 | 0.5 |
| 53 | Phosmet | Insecticide | 0.01 | 0.27 |
| 54 | Phoxim | Insecticide | 0.004 | 0.5 |
| 55 | Prochloraz | fungicide | 0.01 | 0.39 |
| 56 | Procymidone | fungicide | 0.1 | 2.11 |
| 57 | Profenofos | Insecticide | 0.03 | 0.3 |
| 58 | Propamocarb | fungicide | 0.4 | 0 |
| 59 | Pyraclostrobin | fungicide | 0.03 | 0.52 |
| 60 | Pyridaben | Acaricide | 0.01 | 1.3 |
| 61 | Pyrimethanil | fungicide | 0.2 | 0.17 |
| 62 | Quintozene | fungicide | 0.01 | 0.35 |
| 63 | Taufluvalinate | Insecticide | 0.003 | 0.42 |
| 64 | Tebufenozide | Insecticide | 0.02 | 1.54 |
| 65 | Thiamethoxam | Insecticide | 0.08 | 1.24 |
| 66 | Triadimefon | fungicide | 0.03 | 0.75 |
| 67 | Triazophos | Insecticide | 0.001 | 0.011 |
| 68 | Vinclozolin | fungicide | 0.01 | 0.32 |

*Note.* ADI is the acceptable daily intake (mg kg-1 bw). The ADIs of pesticides were used according to the National Food Safety Standard-MRLs for Pesticides in Food (Ministry of Agriculture and Rural Affairs of the People's Republic of China, 2021). LOD is Limit of detection.

Table S2 Detection concentrations of pesticides in waxy yam samples

| planting sites | Sample number | azoxystrobin | prochloraz | carbendazim |
| --- | --- | --- | --- | --- |
| 1 | 1-11-2 | n.d. | n.d. | n.d. |
|  | n.d. | n.d. | n.d. |
|  | 1-3 | n.d. | n.d. | n.d. |
|  | 1-4 | n.d. | n.d. | n.d. |
|  | 1-5 | n.d. | n.d. | n.d. |
|  | 1-6 | n.d. | n.d. | n.d. |
| 2 | 2-1 | n.d. | n.d. | n.d. |
|  | 2-2 | n.d. | n.d. | n.d. |
|  | 2-3 | n.d. | n.d. | n.d. |
|  | 2-4 | n.d. | n.d. | n.d. |
|  | 2-5 | n.d. | n.d. | n.d. |
|  | 2-6 | n.d. | n.d. | n.d. |
| 3 | 3-1 | n.d. | n.d. | n.d. |
|  | 3-2 | **0.012** | n.d. | n.d. |
|  | 3-3 | n.d. | n.d. | n.d. |
|  | 3-4 | n.d. | n.d. | **0.049** |
|  | 3-5 | **0.025** | n.d. | n.d. |
|  | 3-6 | n.d. | n.d. | n.d. |
| 4 | 4-1 | n.d. | n.d. | n.d. |
|  | 4-2 | n.d. | n.d. | n.d. |
|  | 4-3 | n.d. | **0.027** | n.d. |
|  | 4-4 | **0.031** | n.d. | **0.036** |
|  | 4-5 | n.d. | **0.022** | n.d. |
|  | 4-6 | n.d. | n.d. | n.d. |
| 5 | 5-1 | n.d. | n.d. | n.d. |
|  | 5-25-35-4 | **0.008** | **0.011** | n.d. |
|  | n.d. | n.d. | **0.022** |
|  | n.d. | n.d. | n.d. |
|  | 5-5 | n.d. | n.d. | n.d. |
|  | 5-6 | **0.033** | n.d. | n.d. |
| 6 | 6-1 | n.d. | **0.024** | n.d. |
|  | 6-2 | **0.012** | **0.007** | **0.009** |
|  | 6-3 | n.d. | n.d. | n.d. |
|  | 6-4 | n.d. | n.d. | n.d. |
|  | 6-5 | **0.017** | n.d. | n.d. |
|  | 6-6 | n.d. | n.d. | **0.014** |
| 7 | 7-1 | n.d. | n.d. | n.d. |
|  | 7-2 | n.d. | n.d. | n.d. |
|  | 7-3 | **0.021** | n.d. | **0.015** |
|  | 7-4 | n.d. | n.d. | n.d. |
|  | 7-5 | n.d. | n.d. | n.d. |
|  | 7-6 | n.d. | n.d. | n.d. |
|  | 7-6 | **0.027** | n.d. | n.d. |

n.d.: not detected