**Table S1: Amount of chlorpyrifos (Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 3.12±0.8 | 4.30±0.8 | 2.94±0.18 | 2.75±1.01 | 4.23±1.03 | 4.11±0.33 | 5.14±1.33 | 4.21±1.01 |
| 3 | 2.22±0.8 | 1.97±1.1 | 1.02±0.75 | 1.41±2.33 | 2.11±0.74 | 3.31±0.10 | 3.12±3.31 | 2.75±1.23 |
| 5 | 1.31±0.4 | 0.51±2.1 | 0.31±0.31 | 0.61±0.77 | 1.23±0.22 | 1.95±0.02 | 1.42±2.11 | 1.35± 0.09 |
| 8 | bdl | 0.11±1.1 | 0.05±0.74 | bdl | bdl | 0.81±0.08 | bdl | 0.82± 0.19 |
| 10 | ND | bdl | ND | ND | ND | bdl | ND | ND |

**Table S2: Amount of chlorpyrifos (Nitro, Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 2.11±0.08 | 1.20±0.08 | 1.35 ±0.35 | 1.91±0.22 | 2.43±0.09 | 3.44±0.07 | 2.28±0.10 | 2.10±0.02 |
| 3 | 1.68±0.50 | 0.94±0.44 | 1.01 ±0.55 | 1.25±0.07 | 1.98±0.06 | 2.60±0.10 | 1.40±0.15 | 1.70±0.05 |
| 5 | 0.62±0.46 | 0.13±0.36 | 0.38 ±0.08 | 0.13±0.65 | 0.15±0.11 | 0.92±0.05 | bdl | 0.08±0.10 |
| 8 | bdl | 0.06±0.09 | 0.06 ±0.05 | bdl | 0.06±0.03 | 0.07±0.09 | ND | ND |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S3: Amount of Cypermethrin (Nitro, Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 1.22±0.08 | 1.27±0.15 | 1.01 ±0.08 | 0.85±0.03 | 1.32±0.02 | 1.87±0.06 | 1.94±0.02 | 1.02±0.20 |
| 3 | 0.13±0.05 | 1.05±0.06 | 0.63 ±0.04 | 0.49±0.07 | 0.13±0.55 | 1.04±0.09 | 0.41±0.08 | 0.17±0.08 |
| 5 | 0.07±0.05 | 0.08±0.10 | 0.09 ±0.15 | 0.10±0.12 | bdl | 0.07±0.35 | bdl | bdl |
| 8 | bdl | bdl | bdl | bdl | ND | bdl | ND | ND |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S4: Amount of Double Imidacloprid (Double, Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 1.13±0.15 | 1.44±0.08 | 1.62± 0.06 | 1.65±0.10 | 1.58±0.09 | 1.98±0.03 | 1.02±0.10 | 2.05±0.02 |
| 3 | 0.47±0.06 | 0.60±0.07 | 0.88± 0.10 | 1.27±0.09 | 1.12±0.10 | 1.52±0.08 | 0.41±0.03 | 1.12±0.01 |
| 5 | 0.06±0.15 | 0.05±0.15 | 0.04± 0.10 | 0.03±0.15 | 0.65±0.08 | 1.01±0.08 | 0.03±0.07 | 0.33±0.04 |
| 8 | bdl | bdl | bdl | bdl | ND | ND | bdl | bdl |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S5: Amount of Double Cypermethrin (Double, Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 0.65±0.09 | 1.61±0.08 | 1.05± 0.08 | 1.17±0.15 | 1.25±0.06 | 1.60±0.05 | 0.52±0.03 | 1.87±0.04 |
| 3 | 0.17±0.09 | 0.45±0.10 | 0.13± 0.05 | 1.03±0.10 | 1.00±0.06 | 1.02±0.06 | 0.09±0.06 | 1.01±0.04 |
| 5 | 0.04±0.10 | 0.06±0.03 | 0.06± 0.09 | 0.06±0.04 | 0.35±0.05 | 0.30±0.10 | bdl | 0.10±0.06 |
| 8 | bdl | bdl | bdl | bdl | ND | ND | bdl | bdl |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S6: Amount of Acephate (Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 1.85±0.03 | 2.75 ± 0.04 | 2.61 ± 0.06 | 2.03±0.03 | 2.1 ± 0.08 | 2.44±0.03 | 1.69±0.01 | 1.71 ± 0.05 |
| 3 | 0.6 ± 0.01 | 2.12 ± 0.05 | 2.01 ± 0.05 | 1.27±0.02 | 1.28±0.05 | 2.0± 0.07 | 0.88±0.05 | 0.96 ± 0.07 |
| 5 | 0.07±0.02 | 0.31 ± 0.02 | 0.14 ± 0.05 | 0.32±0.02 | 0.08±0.03 | 1.17±0.01 | 0.06±0.03 | 0.15 ± 0.02 |
| 8 | ND | ND | ND | ND | ND | ND | ND | ND |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S7: Amount of lambda-cyhalothrin (Av. ± SD, µg g-1) in different vegetables**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chili** | **Cucumber** |
| Control | bdl | | | | | | | |
| 1 | 0.19±0.09 | 0.26±0.01 | 0.22 ± 0.10 | 0.24 ± 0.02 | 0.21± 0.03 | 0.23 ± 0.02 | 0.12 ± 0.05 | 0.16 ± 0.02 |
| 3 | 0.04±0.03 | 0.07±0.02 | 0.06 ± 0.05 | 0.05 ± 0.03 | 0.05 ± 0.05 | 0.06± 0.03 | bdl | bdl |
| 5 | ND | bdl | bdl | bdl | ND | bdl | ND | ND |
| 8 | ND | ND | ND | ND | ND | ND | ND | ND |
| 10 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S8: Dissipation percentage of Vita in vegetable on 3rd, 5th, 8th and 10th day of spraying**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAS** | **Dissipation of chlorpyrifos (%)** | | | | | | | |
| **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chilli** | **Cucumber** |
| 3 | 29 | 45 | 65 | 49 | 50 | 19 | 39 | 34 |
| 5 | 58 | 76 | 89 | 77 | 71 | 52 | 72 | 68 |
| 8 | 91 | 93 | 99 | 100 | 86 | 80 | 100 | 81 |
| 10 | ND | 100 | ND | ND | ND | 100 | ND | ND |

**Table S9: Dissipation percentage of chlorpyrifos and cypermethrin in the vegetable samples**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Days of spraying | Pesticide | Dissipation (%) | | | | | | | |
| Tomato | Cabbage | Cauliflower | Bottle  gourd | Sweet gourd | Sponce gourd | Green chili | Cucumber |
| 3 | Chlorpyrifos | 43 | 17 | 25 | 34 | 19 | 44 | 39 | 19 |
| Cypermethrin | 64 | 35 | 37 | 42 | 90 | 68 | 76 | 83 |
| 5 | Chlorpyrifos | 76 | 89 | 71 | 93 | 93 | 78 | 100 | 99 |
| Cypermethrin | 94 | 95 | 91 | 88 | 100 | 100 | 100 | 100 |
| 8 | Chlorpyrifos | 100 | 95 | 94 | 100 | 100 | 100 | - | - |
| Cypermethrin | 100 | 100 | 100 | 100 | - | - | - | - |

**Table S10: Dissipation percentage of imidacloprid and cypermethrin in the vegetable samples**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Days of spraying | Pesticide | Dissipation percentage (%) | | | | | | | |
| tomato | cabbage | cauliflower | bottle  gourd | sweet gourd | sponce gourd | green chili | Cucumber |
| 3 | Imidacloprid | 58 | 60 | 45 | 23 | 34 | 34 | 59 | 45 |
| Cypermethrin | 73 | 72 | 56 | 26 | 32 | 36 | 82 | 47 |
| 5 | Imidacloprid | 94 | 97 | 96 | 98 | 58 | 56 | 97 | 83 |
| Cypermethrin | 93 | 96 | 94 | 96 | 80 | 82 | 100 | 95 |
| 8 | Imidacloprid | 100 | 100 | 100 | 100 | - | - | 100 | 100 |
| Cypermethrin | 100 | 100 | 100 | 100 | - | - | 100 | 100 |

**Table S11: Dissipation percentage of Acephate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Days of spraying | Dissipation percentage of Acephate(%) | | | | | | | |
| Tomato | Cabbage | Cauliflower | Bottle gourd | Sweet gourd | Sponce gourd | Green chilli | Cucumber |
| 3 | 64 | 26 | 23 | 37 | 40 | 28 | 47 | 43 |
| 5 | 100 | 89 | 95 | 85 | ND | 54 | ND | 92 |
| 8 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table S12: Dissipation percentage of lambda-cyhalothrin**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Days of spraying** | **Dissipation of lambda-cyhalothrin (%)** | | | | | | | |
| **Tomato** | **Cabbage** | **Cauliflower** | **Bottle gourd** | **Sweet gourd** | **Sponce gourd** | **Green chilli** | **Cucumber** |
| 3 | 78 | 73 | 70 | 73 | 76 | 78 | 100 | 100 |
| 5 | 100 | 100 | 100 | 100 | 100 | 100 | - | - |

**Table S13: Recovery percentages for storage stability test**

|  |  |  |  |
| --- | --- | --- | --- |
| **Samples** | **Pesticide** | **Recovery% ± SD** | **% RSD** |
| Tomato | Chlorpyrifos | 92 ± 1.5 | 1.6 |
| Cypermethrin | 88 ± 3.5 | 3.9 |
| Imidacloprid | 90 ± 3.8 | 4.2 |
| Lambda-cyhalothrin | 85 ± 1.5 | 1.7 |
| Acephate | 87 ± 2.5 | 2.9 |
| Cabbage | Chlorpyrifos | 86 ± 2.0 | 2.3 |
| Cypermethrin | 88 ± 2.5 | 2.8 |
| Imidacloprid | 95 ± 1.5 | 1.8 |
| Lambda-cyhalothrin | 86 ± 3.5 | 4.1 |
| Acephate | 90 ± 1.0 | 1.1 |
| Green chili | Chlorpyrifos | 85 ± 3.0 | 3.5 |
| Cypermethrin | 88 ± 2.8 | 3.1 |
| Imidacloprid | 90 ± 3.0 | 3.3 |
| Lambda-cyhalothrin | 84 ± 1.8 | 2.1 |
| Acephate | 92 ± 2.5 | 2.6 |
| Cucumber | Chlorpyrifos | 90 ± 1.2 | 1.3 |
| Cypermethrin | 87 ± 2.8 | 3.2 |
| Imidacloprid | 93 ± 3.6 | 3.8 |
| Lambda-cyhalothrin | 88 ± 3.0 | 3.4 |
| Acephate | 85 ± 2.5 | 2.9 |