**Table S1.** Information regarding Bifenthrin (Jaffer Group of Companies, Pakistan)

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Bifenthrin** | **Information** |
| 1 | CAS R. No.  | 82657-04-3 |
| 2 | Active Ingredient  | 10% (LC50 96 hr/10 => 60 µg/10 = 6 µg) |
| 3 | Molecular Formula | C23H22CIF3O2 |
| 4 | Molecular Weight | 422.9 g/mol |
| 5 | Chemical name | (2-methyl-3-phenylphenyl)methyl 2-[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate  |
| 6 | Chemical Structure |  |

**Table S2.** Determination of LC50 of bifenthrin against *Ctenopharyngodon idella* for 96 h

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| S. No | Concentration Bifenthrin (µg/L) | Log Concentration | Number of fish exposed | No of alive fish | No of dead fish | Percent mortality (%) | Probit Mortality |
| 1 | 15 | 1.1761 | 10 | 10 | 0 | 0 | 0.00 |
| 2 | 30 | 1.4771 | 10 | 9 | 1 | 10 | 3.72 |
| 3 | 45 | 1.6532 | 10 | 8 | 2 | 20 | 4.16 |
| 4 | 60 | 1.7782 | 10 | 6 | 4 | 40 | 4.75 |
| 5 | 75 | 1.8751 | 10 | 3 | 7 | 70 | 5.52 |
| 6 | 90 | 1.9542 | 10 | 0 | 10 | 100 | 8.09 |

**Table S3.** Behavioral profile of bifenthrin intoxicated *Ctenopharyngodon idella*

|  |  |  |
| --- | --- | --- |
| Behavior | Control | Treated |
| Jumping | ‒ | + |
| Erratic swimming | ‒ | + |
| Body twitches  | ‒ | + |
| Motionless state | ‒ | + |
| Vertical position | ‒ | + |
| Air gulfing | ‒ | + |
| Rapid gill movement | ‒ | + |
| Equilibrium loss | ‒ | + |

+ = Present; ‒ = Absent

**Fig. S1.** Determination of LC50 of bifenthrin against *Ctenopharyngodon idella* for 96 h (Log Concentration × Percent Mortality; Probit Kill × Log Concentration)