**Human dietary intake and hazard characterization for residues of neonicotinoides and organophosphorus pesticides in Egyptian honey**

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**Table S1.** Concentrations of untransformed, active ingredient, neonicotinoids (NIs) in honey reported previously in comparison to the present study.

|  |  |  |
| --- | --- | --- |
| **NIs** | **Mean Concentration**  **(µg kg-1, wm) in honey** | **References** |
| Acetamiprid | ND | Mullin et al. (2010) |
| ND | Codling et al. (2016) |
| 5.7- 4 | (Spring- Summer) present study |
| Clothanidin | ND | Codling et al. (2016) |
| 0.9a | Cutler and Scott-Dupree (2007) |
| ND | present study |
| Imidacloprid | 2a | Kamel (2010) |
| 32.1 | Codling et al. (2016) |
| (0.5-1.1) | (Spring- Summer) present study |
| Thicloprid | 33a | Frazier et al. (2008) |
| 3.6 | Codling et al. 2016) |
| ND | present study |
| Thiamethoxam | ND | Mullin et al. (2010) |
| 75 | Codling et al. (2016) |
| 18.8-ND | (Spring- Summer) present study |
| **Imidaclopid metabolites** | | |
| Olefin | 46.4 | Codling et al. (2016) |
| 0.9-ND | (Spring- Summer) present study |
| 5-hydroxy | 71.4 | Codling et al. (2016) |
| 0.7-0.4 | (Spring- Summer) present study |
| urea | 7.1 | Codling et al. (2016) |
| ND | present study |
| desnitro olefin | ND-0.5 | (Spring- Summer) present study |
| desnitro HCL | 3.6 | Codling et al. (2016) |
| ND | present study |
| 6-chlornicotinic acid | ND | Codling et al. (2016) |
| 0.6-ND | (Spring- Summer) present study |
| Dinotefuran | 0.6-0.6 | (Spring- Summer) present study |
| Di-Urea | 0.4-0.45 | (Spring- Summer) present study |
| Di-DN-Phos | 0.9-0.9 | (Spring- Summer) present study |

a These are the upper concentrations.

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| **Pesticides** | **Concentration of OPs**  **in Honey (** **µg kg-1** **, wm)** | **References** |
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| **Diazinon** | ND | Rissato et al. (2007) |
| 35 | Johnson et al. (2010) |
| 14 | Wiest et al. ( 2011) |
| 67.3 | Eissa et al. (2014) |
| 0.3 | Al Naggar et al. (2015b) |
| (ND-0.3 ) | (Spring-Summer) )Present study) |
| **Malathion** | 0.24 | Rissato et al. (2007( |
| 243 | Johnson et al. (2010) |
| ND | Chuazat et al. ( 2011) |
| 14 | Eissa et al. (2014) |
| ND | ( present study) |
| **Dimethoate** | 9 | Johnson et al. (2010) |
| ND | Wiest et al. (2011) |
| 1.5 | Al Naggar et al. (2015b) |
| ( 3.36-ND ) | (Spring-Summer) )Present study) |
| **Coumaphos** | 2020 | Mullin et al. (2010) |
| 29 | Wiest et al. (2011) |
| 934 | Chuazat et al. ( 2011) |
| 60 | Pareja et al. ( 2011) |
| ND | ( present study) |
| **Phorate** | 0.9 | Johnson et al. (2010) |
| ND | (present study) |
| **Dichlorvos** | ND | Rissato et al. (2007) |
| 8 | Johnson et al. (2010) |
| ND | Wiest et al .(2011) |
| ( 1.9-ND ) | (Spring-Summer) |
| **Profenofos** | ND | Rissato et al. (2007( |
| 166 | Eissa et al. (2014) |
| ( ND-0.23 ) | )Spring-Summer( |
| **Chlorpyrifos** | 0.01 | Rissato et al. ( 2007) |
| 15 | Johnson et al. (2010) |
| 80 | Pareja et al. (2011) |
| ND | Wiest et al.(2011( |
| 10 | Eissa et al. (2014) |
| ( ND-3.3 | (Spring-Summer( |
| **Ch. Methyl** | 0.2 | Johnson et al. (2010) |
| ND | ( present study) |
| **Fenthion** | ND | (Rissato et al. (2007) |
| ND | (present study) |

**Table S 2.** Concentrations of organophosphorus pesticides (OPs) in honey reported previously in comparison to the present study.