

2016 年與 2017 年疑似中毒案件之有機磷類與氨基甲酸鹽類農藥檢測

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摘要

- 2016 年與 2017 年受理之動物疑似中毒案件共計 363 件，經以氣相層析質譜儀（Gas Chromatography-Mass Spectrometry, GC/MSD）與高效液相層析儀（High Performance Liquid Chromatography, HPLC）分別進行有機磷類（organophosphates）與氨基甲酸鹽類（carbamates）農藥之檢測，結果有 177 件檢出氨基甲酸鹽類農藥，16 件檢出有機磷類農藥。檢出之農藥以加保扶（carbofuran）達 142 件最多，其次有 33 件檢出納乃得（methomyl），8 件檢出福瑞松（phorate），7 件檢出托福松（terbufos），滅賜克（methiocarb）、歐殺滅（oxamyl）、撲滅松（fenitrothion）則各檢出 1 件。送檢案件涉及之動物以犬隻最多（147 件），其次為禽鳥（112 件）與貓隻（35 件），檢出率亦以犬隻最高（68.03%），其次為禽鳥（54.46%）。送檢件數以 1-3 月（138 件）最多，7-9 月（51 件）最少；檢出率亦以 1-3 月（60.14%）最高，7-9 月（25.49%）最低。

Detection of organophosphate and carbamate pesticides in suspected cases of animal poisoning from 2016 to 2017

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Abstract

A total of 363 suspected cases of animal poisoning were submitted to the Animal Health Research Institute from 2016 to 2017, and case samples were subjected to organophosphate and carbamate pesticide analyses, using gas chromatography/mass spectrometry (GC/MSD) and high performance liquid chromatography (HPLC), respectively. Carbamate pesticides were detected in 177 cases and organophosphate pesticides were found in 16 cases. Carbofuran was the most frequently detected pesticide, having been identified in 142 cases. Other compounds detected included methomyl in 33 cases, phorate in 8 cases, terbufos in 7 cases, and methiocarb, oxamyl, fenitrothion were each found in one case. The highest number of animal poisoning cases were found in dogs (147 cases), followed by birds (112 cases) and cats (35 cases), and the detection rate was also similarly found to be highest in dogs (68.03%), and followed by birds (54.46 %). The number of submissions peaked from January to March (138 cases), and were the lowest from July to September (51 cases). The detection rate again followed the submission rate with the highest detections from January to March (60.14%) and the lowest from July to September (25.49%).