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**NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC  
OF CHINA**

**中华人民共和国国家标准**

GB/T 20771-2008  
Partial Replace GB/T 20771-2006

**Determination of 486 pesticides and related chemicals  
residues in honey - LC-MS-MS method**  
**蜂蜜中 486 种农药及相关化学品残留量的测定**  
**液相色谱-串联质谱法**

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# Determination of 486 pesticides and related chemicals residues in honey - LC-MS-MS method

## 1. Scope

This standard specifies the liquid chromatography-tandem mass spectrometry (LC-MS-MS) method for determination of 486 pesticides and related chemicals residues in acacia honey, rape honey, linden honey, buckwheat honey and date honey (see Annex A and Annex E).

This standard is applicable to qualitative identification of 486 pesticides and related chemicals in acacia honey, rape honey, linden honey, buckwheat honey and date honey, and is also applicable to quantitative determination of 461 pesticides and related chemicals residues.

The detection limit of the method for quantitative determination of 461 pesticides and related chemicals in this standard is 0.01 $\mu$ g/kg - 3.34 mg/kg (see Annex A).

## 2. Normative References

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 6379.1 Accuracy (trueness and precision of measurement methods and results - Part 1: General principles and definitions (GB/T 6379.1-2004, ISO 5725-1: 1994, IDT)

GB/T 6379.2 Accuracy (trueness and precision) of measurement methods and results - Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method (GB/T 6379.2-2004, ISO 5725-2: 1994, IDT)

GB/T 6682 Water for analytical laboratory use - Specification and test methods (GB/T 6682-2008, ISO 3696: 1987, MOD)

## 3. Principle

Use dichloromethane for extraction of the sample, use acetonitrile + toluene (3 +1) to elute the pesticides and related chemicals after purifying by solid phase extraction column, use liquid

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