

# GUIDELINES FROM CHINA'S GENERAL ADMINISTRATION OF QUALITY SUPERVISION, INSPECTION, AND QUARANTINE (AQSIQ), FOR MOSQUITO DISINSECTION DUE TO ZIKA VIRUS

## 出入境交通工具、集装箱及货物寨卡病毒 病、黄热病灭蚊处理技术方案

Zika Virus and Yellow Fever Disinsection Technical Entry and  
Exit Scheme for Means of Transport, Containers, and Cargo

### 一、灭蚊处理证明

#### 1: Proof of Disinsection

依照世界卫生组织( WHO )建议的杀虫药剂和处理方法或始发国( 地区 )政府部门批准使用的杀虫药剂和处理方法或其它有效的方法对交通工具、集装箱和货物实施了灭蚊处理并出具灭蚊证明。

Carry out disinsection and issue proof of disinsection relying on WHO-recommended insecticides and disinsection methods, the State of Origin (or regional) government agency-approved insecticides and disinsection methods, or other effective methods for transportation, containers, and cargo.

灭蚊证明包括下列三种类型：

Proof of disinsection includes the following three types:

( 1 ) 有效的灭蚊证书 ( 由官方签发 ), 应注明处理对象唯一性的标识 : 如航空器识别号、船舶名称 ( 或 IMO 号 )、列车班次、车辆车号、集装箱箱号等 ;

(1) A valid certificate of disinsection issued by the government, which should indicate the uniqueness of the identification process target: e.g., the aircraft identification number, the vessel number (or IMO number), number of trains, car number, container number, etc;

( 2 ) 有效的灭蚊处理证明 ( 由官方认可的机构签发 ), 应注明处理方法、时间、时效、地点、药剂名称、用量、处理单位、收货人/发货人等 ;

(2) Proof of valid disinsection (issued by a government-approved organization), which should indicate the method of disinsection, time, period of effectiveness, place, name of the pesticide, amount used, the processing unit, the recipient and sender of the goods, etc.;

( 3 ) 有效的航空器灭蚊处理后的药剂空罐等。

(3) A valid and empty pesticide container used after airplane disinsection, etc.

交通工具和集装箱的灭蚊证明应分别出具。

Proof of disinsection for means of transport and containers should be issued separately.

途经疫区的交通工具、集装箱未装卸货物、上下人员的不需出具灭蚊证明。

When passing through infected areas, the means of transport, containers carrying cargo that has not been unloaded, and staff from top to bottom do not need to be issued proof of disinsection.

## 二、灭蚊处理指征

### 2: Indications for Disinsection

(一) 主动申报或入境检疫查验时发现各种检疫对象携带有成蚊、蚊幼、蛹、卵的；

(1) Any object that is proactively-declared or discovered during entry-exit quarantine inspections to hold active mosquitoes, mosquito larva, pupa, and/or eggs;

(二) 交通工具上载有蚊媒传染病病例、疑似病例或有受染嫌疑的；

On the means of transportation are loaded cases of mosquito-borne diseases, suspected cases, or are suspected of being contaminated;

(三) 来自受染地区无有效灭蚊证明，携带蚊虫的。

(3) Come from contaminated areas and either do not have valid proof of disinsection and/or are carrying mosquitoes.

### 三、灭蚊处理方式及用药推荐

#### 3: Recommended methods of disinsection and pesticides

##### (一) 灭蚊处理方式

##### (1) Methods of disinsection

1. 表面喷洒 :适用于船舶生活区外开放场所及散装货物、车辆的灭蚊处理。

1. Surface Spraying: Suitable for disinsection of vessels, open spaces, and bulk cargo and vehicles outside of living areas.

2. 空间喷洒 :适用于船舶生活区及货舱内、航空器机舱、列车车厢内等密闭场所及集装箱的灭蚊处理。

2. Space Spraying: Suitable for disinsection within the ship living area and cargo, aircraft cabin, train car, and other confined spaces and containers.

3. 熏蒸处理 :适用于集装箱及其内部货物、船舶及其货舱内货物的灭蚊处理。

3. Fumigation Processing: Suitable for disinfection of containers and their internal cargo, within vessels and their cargo holds.

##### (二) 常用灭蚊药剂

##### (2) Frequently-used Insecticides

1. 表面喷洒和空间喷洒 :拟除虫菊酯类杀虫剂等 ;

1. Surface spraying and space spraying: Pyrethroid insecticides;
  2. 熏蒸处理：硫酰氟等；
  2. Fumigation processing: Sulfuryl fluoride, etc.;
  3. 航空器应使用WHO推荐的药剂。
  3. Aircraft should use WHO-recommended insecticides.
- 剂量按照WHO推荐 ( 表1、表2、表3 ) 的或药品使用说明书。

The dosage amount should be according to the WHO recommendations (Table 1, 2, and 3) or the medicine usage directions.

表 1.适用室内滞留喷洒防制蚊虫的药物和常用剂量

Table 1: Suitable pesticides and usual dosages for indoor residual spraying to prevent mosquitoes

农药名称 Pesticide Name	剂量(有效成分) (g/m <sup>2</sup> ) Dosage (of the active ingredient)	持效期 (月) Period of effectiveness (months)	农药名称 Pesticide name	剂量(有效成分) (g/m <sup>2</sup> ) Dosage (of the active ingredient)	持效期 (月) Period of effectiveness (months)

Unofficial English Translation

噁虫威 bendiocarb	0.100~0.400	2~6	顺式氯氰菊酯 $\alpha$ -cypermethrin	0.020~0.030	4~6
残杀威 propoxur	1~2	3~6	联苯菊酯 bifenthrin	0.025~0.050	3~6
*滴滴涕 DDT	1~2	>6	氟氯氰菊酯 cyfluthrin	0.020~0.050	3~6
杀螟硫磷 fenirothion	2	3~6	溴氰菊酯 deltamethrin	0.020~0.025	3~6
马拉硫磷 malathion	2	2~3	醚菊酯 etofenprox	0.100~0.300	3~6
甲基嘧啶磷 pirimiphos-methyl	1~2	2~3	高效氯氟氰菊酯 $\lambda$ -cyhalothrin	0.020~0.030	3~6

注：\*在我国不允许用于卫生杀虫剂。

表2. 适用气雾剂防制蚊虫的药剂与常用剂量

Table 2. Suitable pesticides and usual dosage amount for aerosol pesticides to prevent mosquitoes

农药名称 Pesticide name	剂量(有效成分) (mg/m <sup>2</sup> ) Dosage (active ingredient)
杀螟硫磷 fenirothion	25.00~30.00
马拉硫磷 malathion	11.20~60.00
甲基嘧啶磷 pirimiphos-methyl	23.00~33.00
生物苄呋菊酯 bioresmethrin	0.50
氟氯氰菊酯 cyfluthrin	0.10~0.20
氯氰菊酯 cypermethrin	0.10~0.30
苯醚氰菊酯 cyphenothrin	0.20~0.50
精右旋苯醚氰菊酯 d, d-trans-cyphenothrin	0.10~0.20
溴氰菊酯 deltamethrin	0.05~0.10
右旋苯醚菊酯 d-phenothrin	0.50~2.20
醚菊酯 etofenprox	1.00~2.00
高效氯氟氰菊酯 $\lambda$ -cyhalothrin	0.10
氯菊酯 permethrin	0.50
苄呋菊酯 resmethrin	0.20~0.40

表3. 适用于防制蚊幼虫的药物剂型和剂量

## Unofficial English Translation

Table 3: Suitable pesticides and dosage to prevent mosquito larvae

农药名称 Pesticide name	剂型 Pesticide type	剂量(有效成分) (mg/m <sup>2</sup> ) Dosage (active ingredient)	农药名称 Pesticide name	剂型 Pesticide type	剂量(有效成分) (mg/m <sup>2</sup> ) Dosage (active ingredient)
苏云金杆菌 <i>bacillus thuringiensis israelensis</i>	水分散粒剂 Water-dispersible granules	a	吡丙醚 pyriproxyfen	颗粒剂 Granules	0.5~1.0
双硫磷 temephos	乳油,颗粒剂 Emulsifiable, granules	5.6~11.2	毒死蜱 chlorpyrifos	乳油 Emulsifiable	1.1~2.5
除虫脲 diflubenzuron	可湿性粉剂 Wettable powder	2.5~10.0	倍硫磷 fenthion	乳油,颗粒剂 Emulsifiable, granules	2.2~11.2
烯虫酯 methoprene	乳油 Emulsifiable	2.0~4.0	甲基嘧啶磷 pirimiphos-methyl	乳油 Emulsifiable	5.0~50.0
双苯氟脲 novaluron	乳油 Emulsifiable	1.0~10.0			

注: a 在孳生容器中使用量为 1mg/L~5mg/L。

### (三) 灭蚊效果评价指标

#### (3) Indices to evaluate effectiveness of disinsection

1、成蚊：不得有活蚊。

1. Adult mosquitoes: Cannot have live mosquitoes.

2、蚊蚋及蛹：容器中不得有活蚊蚋及蛹。

2. Mosquito larvae and pupa: Containers cannot contain live larvae or pupa.

### (四) 注意事项

#### **(4) Precautions**

1. 内部温度低于 15°C 的冷冻、冷藏集装箱、货舱一般不实施灭蚊处理（检疫查验发现蚊卵的除外）；

1. Disinsection generally should not be carried out when internal temperatures in frozen and refrigerated containers and cargo is below 15 degrees Celsius (except for when quarantine inspection finds mosquito eggs);

2. 下列对象在发现蚊类时，应在保证货物安全的前提下实施灭蚊处理：有毒有害物品、危险化学品、散装食品、水果、散装饲料、精密仪器、食品接触材料等货物及其装运的集装箱和货舱。

2. When mosquitoes are discovered, disinsection should be carried out under the prerequisite of ensuring cargo safety for the following objects: toxic and hazardous materials, dangerous chemicals, bulk food, fruits, bulk feed, precision instruments, materials that come in contact with food, etc. and the containers and cargo in which they are transported.

3. 灭蚊处理应在保证灭蚊效果前提下，选择高效低毒的药剂、简便易行方式实施。

3. To carry out disinsection under the prerequisite of ensuring effective disinsection, choose high-efficiency and low-toxicity pharmaceutical agents to facilitate simple and easy implementation.