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# **China, People's Republic of**

## **Food and Agricultural Import Regulations and Standards**

### **"Green" Food Standard**

### **2001**

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#### **Report Highlights:**

**This is an UNOFFICIAL English translation of the People's Republic of China "Green Food" Standard and should be used as a guide only. Exporters carefully discuss regulations and their application with Chinese importers to ensure that their interpretation of the regulations is accurate.**

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Includes PSD changes: No  
Includes Trade Matrix: No  
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This report was prepared by the Office of Agricultural Affairs of the USDA/Foreign Agricultural Service in Beijing, People's Republic of China for U.S. exporters of domestic food and agricultural products. While every possible care was taken in the preparation of this report, information provided may not be completely accurate either because policies have changed since its preparation, or because clear and consistent information about these policies was not available. It is highly recommended that U.S. exporters verify the full set of import requirements with their foreign customers, who are normally best equipped to research such matters with local authorities, before any goods are shipped. FINAL IMPORT APPROVAL OF ANY PRODUCT IS SUBJECT TO THE IMPORTING COUNTRY'S RULES AND REGULATIONS AS INTERPRETED BY BORDER OFFICIALS AT THE TIME OF PRODUCT ENTRY.

## Summary

Green Food, a term similar in meaning to Organic Food, is under the scope of this standard. The Standards are published in a handbook that provides for the appropriate classification, use, and requirements for food products to be labeled "Green Food" and sold on the domestic market. The Standard specifies the environment, fertilizers, pesticides, and other chemicals and the respective dosages that can be used on foods and carry the green food label. The Ministry of Agriculture is the regulating authority for this standard.

## "Green Food" Standard

Design and Use of the Green Food Logo

### 2-1 Basic Style

Basic style for the combination of both Chinese and English names and logo color. The style requirements are as follows. The Chinese name should be above the English name and the names should be in alignment from left to right. The font size and spacing between each line is as the example on the right. The color of the Chinese name should be standard (C100Y90). The color of the English name should be C50Y80 or standard color.



绿色食品

Basic style for the combination of the Green Food logo and the Chinese and English names.



绿色食品  
Greenfood

Basic style for the combination Green Food logo and the Chinese and English names when they are placed on a colored background.

The background color is a standard color.

Basic style for the combination is printed black and white. Color:  
Chinese B100, English B70



## Handbook on the Standards for the Design and Use of Trademarks and Logos of Green Food

The “Handbook on the Standardization for the Design and Use of Trademarks and Logos of Green Food” (hereinafter referred to as the handbook), centered with a green food logo diagram (hereafter referred to as Green Logo), is a guide book standardizing the design and use of the green food logo, the four Chinese characters of “Green Food” and its English equivalent and the subsequent combination of products and the media for advertising. The logo is primarily intended for use by the Administration of Green Food, the users of green food trademark advertising, design, and production firms.

This handbook is based on the requirements for the development of green food business and is finished on the basis of “Handbook on the Standardization of Design of Green Food” that was designed and established in 1991. After several revisions, it is an important step towards the implementation of CI strategy for the green food business.

This handbook is divided into three systems; namely a basic system, a trademark application system and a popularization advertising system. The basic system sets standard requirements for basic elements such as the green logo, the standard color and the standard characters. In any media this mark is used, the whole logo should be reduced or enlarged in proportion and no alteration is allowed as to the size between each important element. The trademark application system is a uniform standard to the product when the green logo is used as a trademark. When it is used, proper use of the mark is required according to the stipulations set forth in this handbook. Wherever this mark appears, the identity mark for registered trademark ® should be attached. Where the handbook fails to give definite requirements, the self-designed documents should be submitted to our center for approval before being utilized. The popularization and advertising system are some examples when the green logo and related descriptions are used as corporate images on all goods and media that are capable of being used by the carrier. When in use, the reproduction should be as close as possible to the styles in the examples.

This handbook plays an important role in the image of the green food business and strengthens the management for the use of the green logo. Each organization sanctioned by this center with the right to use this logo must use this logo on the packaging and advertising of green food in strict accordance to this handbook.

The explanation of this handbook is subject to the China Green Food Development Center.

China Green Food Development Center, October 1997

### Chapter One: Concept of Green Food

#### Green Food

Refers to safe, quality and nutritious food certified by specific authorities that bears the registered green food

mark and is pollution free.

#### Class AA Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production no harmful chemical compounds were used; that are produced and processed in accordance with specific production operation norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the mark of Class AA Green Food.

#### Class A Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production used some chemical compounds within a limited quantity; that are produced and processed in accordance with specific production operational norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the mark of Class A Green Food.

### Chapter Two: Classification Standards for Green Food

#### Standard Composition of Green Food

The standards of green food consist of an environmental quality standard, production operation norms, product standards, storage and transportation standards and other related standards. It is a comprehensive system of quality control standards.

The quality standards for ecological environment of green food production refers to the following: no direct industrial contamination within the growing region of the primary agricultural product or main food material exists; no contamination threat is posed from up stream or by being down wind, and the air quality, soil quality, irrigation water quality, and water quality for raising animals all meet the standards required for green food. Also, there is a set of safeguard measures to ensure that the environmental quality shall not be reduced during the production process in the future.

The production operation norms for green food include standard procedures that all chains of production must follow including the cultivating sector, animal husbandry sector and food processing sector as well as the other principal use sectors of agricultural chemicals, fertilizers, food additives, feed additives and veterinary medicines.

The production standards of green food are set in reference to standards of certain international, state, departmental and industrial levels. Typically, standards are higher or equal to the existing standards of inspection and tests. Green food standards consist of two sections: quality and hygiene. The latter refers to agricultural chemical residue, harmful heavy industry contamination and harmful micro-organism contamination.

The packaging and decoration of green food products should meet the requirements of the Handbook on the Standardization of Design of Logo for Green Food. Organizations that are qualified to use green food logos should use them on both the inside and the outside of packages. The handbook establishes strict regulations concerning the standard design of the green food logo, standard font, the standard combination of design and text, standard color, advertising language and standard design used on food packages. Examples are provided

for application guidance.

On the basis of similar green food standards in foreign countries and considering the specific conditions within China, green food is divided into two categories. The categories are Class AA Green Food and Class A Green Food.

#### Standards of Class AA Green Food

##### Standard for environmental quality

The quality evaluation of atmosphere for green food adopts the first class standard of the State's atmosphere environment quality standard GB3095-82. The evaluation of irrigation water for fields adopts the standards of water quality for field irrigation GB5084-92. The water quality evaluation for water used for raising animals adopts the standards of the State's water quality for fishery sector GB11607-89. The evaluation of processing water adopts the standards of living and drinking water quality GB5749-85. The evaluation of drinking water for poultry and livestock adopts the class three standards of the State's surface water quality GB3838-88. The evaluation for soil quality adopts the average value of background value of such types of soil (for details, refer to Background Values of China's Soil Environment compiled by China General Station for the Monitoring of Environment) plus twice the standard difference. All monitored environmental data in the green food production location shall not exceed related standards.

##### Production operation norms

No harmful chemical compound fertilizers, agricultural chemicals or chemical food additives are allowed to be used during the production of Class AA Green Food. Class AA Green Food evaluation standards adopt related clauses in "Rules for the Use of Agricultural Chemicals during the Production of Green Food", "Rules for the Use of Fertilizers during the Production of Green Food" and "Production Operation Norms in Related Regions".

##### Product standards

No agricultural chemical compounds or food additive chemical compounds should be detectable. Other specifications should meet the industry standards of Class A Green Food products established by the Ministry of Agriculture (NY/T268-95 to NY/T292-95).

##### Packaging standards

The evaluation of green food packages adopts the government standards for related packaging materials, and the general standards for labeling food products GB7718-94 and the Handbook on Standardization of Design of Green Food Marks issued by Ministry of Agriculture and related regulations. The green food mark and standard characters should be the color green and the background should be white.

#### Standards of Class A Green Food

##### Standards of environmental quality

The evaluation standard for Class A Green Food environmental quality is the same as Class AA Green Food with one exception. The exception is that the evaluation method for Class A Green Food adopts a comprehensive contamination index. The comprehensive contamination index for all monitored items (including the atmosphere, soil, and water) shall not exceed 1.

##### Production operation norms

During the production of Class A Green Food products, a specified amount of chemical compounds can be used. Class A Green Food evaluation adopts the Rule for the Use of Agricultural Chemicals in the Production of Green Food, the Rule for the Use of Fertilizers in the Production of Chemicals and some of the related clauses in “Production Operation Norms in the Production of Green Food” for affected regions.

#### Product standards

The industrial standards for Class A Green Food by the Ministry of Agriculture is hereby adopted. (NY/T268-95 to NY/T292-95).

#### Packaging standards

The evaluation of packaging of Class A Green Food hereby adopts the related standards concerning packaging materials established by the state, including the General Standards for the Labeling of Food Products GB7718-94 and the “Handbook on Standardization of Design of Green Food Marks” issued by the Ministry of Agriculture and some of the related regulations. The green food mark and standard characters shall be the color white and the background shall be green.

### Chapter Three: Ecological Environment Quality Standards in Green Food Production Areas

#### 1. Contents of Theme and Application Range

This regulation defines ecological environment quality standards and monitoring methods in green food production areas including atmospheric environment quality standards, field irrigation water quality standards, fishery water quality standards, water processing quality standards, drinking water for livestock and poultry quality standards, and soil quality monitoring standards.

This regulation applies to green food production areas (Class AA and Class A), raw material production areas, livestock and poultry breeding and farming operations, fishery hatcheries, and feed manufacturing areas.

#### 2. Terminology

##### 2.1 Green Food

Refers to safe, quality and nutritious food certified by specific authorities that bears the registered green food mark and is pollution free.

##### 2.2 Class AA Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production no harmful chemical compounds were used; that are produced and processed in accordance with specific production operation norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class AA Green Food.

##### 2.3 Class A Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production used some chemical compounds within a limited quantity; that are

produced and processed in accordance with specific production operational norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class A Green Food.

### 3. Referenced standards

GB3095-82 Atmospheric Environment Quality Standards  
 GB5084-92 Field Irrigation Water Quality Standards  
 GB11607-89 Fishery Water Quality Standards  
 GB5749-85 Drinking Water Quality Standards for Livestock and Poultry  
 GB3838-88 National Surface Water Environment Quality Standards

### 4. Ecological environment quality standards (See table below)

#### 4.1 Atmospheric Environment Quality Standards

Item	Standards		
	Daily average	Any time	Unit
SO <sub>2</sub>	0.05	0.15	Emg/m <sub>3</sub>
Nitrogen Oxide	0.05	0.10	
Total suspended particle	0.15	0.30	
F	7		ug/dm <sup>2</sup> *d

! “Daily average” is the allowed limit for the average concentration on any day.

! “Anytime” is the allowed limit for concentration at any sampling. Sampling time is three times per day between the hours of 7:00-8:00, 14:00-15:00, and 17:00-18:00 over 3 consecutive days.

#### 4.2 Field Irrigation Water Quality Standards

Item	Standards
pH Value#	5.5-8.5
Total Hg#	0.001
Total Cal#	0.005
Total As#	0.05(water field, vegetable)0.1(dry crop)
Total Pb#	0.1
Cr (sexavalence) #	0.1
Chlorate#	250
Fluorate#	2.0(high fluorate region)3.0(ordinary region)
Cyanate#	

#### 4.3 Fishery Water Quality Standards

Item	Standards
Hg#	0.0005
Cal#	0.005
Pb#	0.05
As#	0.05
Cr (sexavalence) #	0.1

Cyanate#	0.005
Fluorate#	1
Solved oxygen#	5
Biochemically needed amount of oxygen#	5

#### 4.4 Drinking Water Quality Standards for Livestock and Poultry

Item	Standards
Hg#	0.0001
Cal#	0.005
Pb#	0.05
As#	0.05
Cr (sexavalence) #	0.005
Cyanate#	0.005
Fluorate#	1.0
Chlorate	250
pH value	6.5-8.5

#### 4.5 Water Processing Quality Standards

Item	Standards
Hg#	0.001
Cal#	0.01
Pb#	0.05
As#	0.01
Cr (sexavalence) #	0.05
Cyanate#	0.05
Fluorate#	1.0
Chlorate	250
Total bacteria	100 count/ml
Total colibacilla	3 count/1
pH value	6.5-8.5

#### 4.6 Soil Quality Standards

4.6.1 The following standards shall be applied depending upon the soil type below (mg/kg):

Contaminants	Hg		Cd		Pb		As		Cr	
	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm
Depth of soil layer										
Soil type										
Spongy soils	0.0356	0.0876	0.1634	0.187	22.42	38.62	14.38	14.38	88.58	75.7
Basket soil	0.1284	0.0256	0.2456	0.152	32.88	30.3	16.76	15.68	78.64	71.32
Black soils	0.0308	0.0314	0.1794	0.2232	25.7	24.34	16.9	15.28	74.2	74.62
Black earth	0.081	0.0762	0.1344	0.134	42.46	39.28	17.18	20.14	77.42	83.58
White pulp soil	0.069	0.1008	0.236	0.154	39.74	47.98	21.1	28.22	81.26	99.82
Chernozem	0.0582	0.038	0.2626	0.2434	34.34	31.78	19.26	20.14	99.5	101.64

Contaminants	Hg		Cd		Pb		As		Cr	
	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm
Depth of soil layer										
Soil type										
Moisture soil	0.1512	0.0698	0.2326	0.2098	37.7	41.06	15.78	16.82	98.06	104.68
Oasis soil	0.0512	0.0524	0.1826	0.1932	28.92	29.38	17.34	20.12	83.46	77.58
Paddy soil	0.551	0.2078	0.377	0.252	66.64	50.16	22.38	20.2	127.28	125.6
Laterite	0.0984	0.0704	0.2716	0.2346	63.14	77.78	17.18	27.64	233.36	256.44
Crimson soil	0.133	0.1722	0.1554	0.1462	83.76	105.64	36.36	62.9	107.3	133.68
Red earth	0.18	0.1866	0.1936	0.1862	54.66	66.12	39.34	35.78	150.44	124.8
Yellow earth	0.2136	0.2636	0.1854	0.1736	56.34	81.9	32.68	35.14	108.1	198.94
Dry red soil	0.0534	0.111	0.4488	0.3348	76.02	94.48	51.94	32.34	110.18	97.8
Yellow brown earth	0.2138	0.1572	0.2812	0.1892	53.4	44.52	24.22	25.74	118.4	122.44
Brown earth	0.1486	0.1766	0.2068	0.1948	44.98	46.1	23.5	24.4	131.2	141.3
Cinnamon soil	0.1242	0.114	0.2406	0.2342	35.08	40.9	20.28	20.7	98.38	111.46
Taupe soil	0.0482	0.0438	0.2756	0.1628	25.2	26.56	16.76	20.54	88.02	98.74
Dark brown earth	0.1088	0.1008	0.2236	0.2036	38.72	40.66	14.38	18.16	103.94	125.58
Brown coniferous forest soil	0.1542	0.1222	0.2376	0.1028	34.86	34.82	13.34	35.9	80.58	84.64
Grey forest soil	0.1828	0.288	0.1506	0.0684	30.54	24.06	19.06	16.84	88.28	103.22
Chestnut soil	0.0778	0.0876	0.1859	0.2124	43.08	41.02	21.8	25.6	101.76	99.98
Brown soil	0.034	0.0252	0.2876	0.2264	39.06	40.52	19.38	22.34	72.54	82.1
Sierozem	0.0294	0.0298	0.1498	0.1772	23.8	24.24	15.82	16.28	77.72	67.6
Desert grey soil	0.0222	0.0202	0.1826	0.1452	32.24	32.34	15.78	14.62	91.48	82
Desert grey brown soil	0.0504	0.0402	0.1952	0.173	27.58	37.82	21.1	37.94	83.4	89.2
Desert brown soil	0.032	0.0398	0.1684	0.1588	26.76	27.22	17.06	16.1	80.22	74.08
Meadow soil	0.1188	0.078	0.1758	0.1344	40.52	35.98	20.1	26.84	89.1	93.66
Boggy soil	0.1244	0.0562	0.2128	0.246	37.4	35.24	27.52	30.62	124.58	108.74
Saline soil	0.1426	0.11	0.2478	0.2416	43.8	36.38	22.42	23.9	105.24	105.86
Alkaline soil	0.064	0.0354	0.1764	0.1646	26.04	33.74	15.54	12.08	67.04	78
Phosphorite	0.1116	0.0654	2.4544	1.5652	3.98	2.34	4.68	5.7	24.18	34.4
Rendzinas	0.5212	0.742	5.553	7.1566	82.78	60.32	75.2	105.48	255.96	285.42
Purple soil	0.1436	0.15	0.227	0.2352	49.14	51.14	18.58	23.8	115.78	101.86
Sand soil	0.0518	0.0258	0.094	0.092	23.58	23.68	8.1	8.56	51.26	54.54
Black felt soil	0.0636	0.066	0.192	0.1696	58.36	46.76	31.46	32.44	123.46	133.56
Grass felt soil	0.0456	0.0398	0.222	0.1972	48.32	65.5	33.14	47.9	155.3	156.88
Baga soil	0.0452	0.646	0.3194	0.168	38.5	52.22	42.82	38.68	141.22	159.98
Saga soil	0.037	0.044	0.2194	0.2116	40.92	39.9	43.42	37.08	185.74	134.86
Cold desert soil	0.0304		0.1142		51.78		29.1		95.36	

Contaminants	Hg		Cd		Pb		As		Cr	
	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm	20cm	40cm
Depth of soil layer										
Soil type										
Alpine desert soil	0.0526	0.1492	0.2556	0.3528	40.28	51.68	28.92	39.7	2.56	111.32
Benzex#0.1					DDT#0.1					

4.6.2 The following standards shall be applied if the soil type is not one of the above.

Contaminants	Standards mg/kg
Hg, Cd, Pb, As, Cr	#arithmetic average of local soil background value(background value) + twice the standard difference
Benzex,DDT	#0.1

4.7 Evaluation Standards for Ecological Environments.

4.7.1 Class AA: Data inspected for each item: atmosphere, water quality and earth must not exceed related standards.

4.7.2 Class A: Comprehensive contamination index of: atmosphere, water quality and earth must not exceed 1.

5. Methods for Sampling and Monitoring

The methods for sampling and monitoring shall apply the related regulations in Essentials of Evaluation for Environmental Quality Status of Green Food Production Areas (Proposed).

Additional description:

Standard endorsed by the China Green Food Development Center

Standard drafted under supervision from the Center for the Supervision, Inspection and Testing of Environmental Quality of the Ministry of Agriculture (Jinan).

Chief authors: Wang Hongtao, Sun Guilan, Xu Zhiqiang, Zhang Yufang, Zhang Feitingm, Yao Xilai, Yuan Jie and Xue Xinhong.

Chapter Four: Operating Standards for Green Food Production

The operating standards for the production of green food includes the standards for agricultural chemicals, fertilizers, food additives, veterinary medicines and feed additives, and the operating standards for each product adapted to the seven climate regions (South China, central China, East China, Southwest China, North China, Northeast China and Northwest China) according to the above standards. Some standards remain to be defined. Operating standards for the production of green food in each climate region shall be printed separately.

Standards for Fertilizer Use in Green Food Production

1. Contents of Theme and Application Range

This standard defines the fertilizers and compositions and their rules of use allowed in the production of Class AA and Class A Green Food.

This standard applies to all farm manure, commercial organic fertilizers, humic acid fertilizers, microbiological fertilizers, semi-organic fertilizers (organic compound fertilizers), inorganic (mineral) fertilizers and foliage fertilizers.

## 2. Terminology

### 2.1 Green Food

Refers to safe, quality and nutritious food certified by specific authorities that bears the registered green food mark and is pollution free.

### 2.2 Class AA Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production no harmful chemical compounds were used; that are produced and processed in accordance with specific production operation norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class AA Green Food.

### 2.3 Class A Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production used some chemical compounds within a limited quantity; that are produced and processed in accordance with specific production operational norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class A Green Food.

### 2.4 Farm Manure

All kinds of organic fertilizers produced, composted, and used on the farm.

### 2.5 Commercial Fertilizers

Fertilizers that are sold as commodities under the control of the state fertilizer department according to the rules and regulations of the state.

## 3. Permitted Fertilizer Types

### 3.1 Farm Manure

This type is a fertilizer that contains biological substances, animal and plant remains, feces and other biological waste. Applying farm manure provides farm crops with complete nutrition, can increase and improve organic soil substances, boost the breeding of microbes, improve the physical and chemical nature along with biological

activity of the soil, and is the main source of nutrition for producing green food.

### 3.1.1 Composts

This type is a kind of organic fertilizer made by composting straw, leaves, grass, water and a small amount of soil.

### 3.1.2 Wet Composts

This type is different from composts in that a wet compost is produced after being submerged in water for fermentation (anaerobic treatment).

### 3.1.3 Animal Manure

This fertilizer type is made by composting pig, cattle, horse, sheep and poultry feces with straw and other materials.

### 3.1.4 Methane Manure

This type is a by-product of organic substance treated anaerobically in a sealed methane-generation pit. Methane manure includes liquefied methane gas and residues.

### 3.1.5 Green Manure

This type is a fertilizer used from green plants cultivated or grown in the wild; principally composed of two categories - leguminosae and nonleguminosae.

Leguminosae green manure includes mung bean, broad bean, sweet clover, Sadawan, sesban, lucerne, tamarix hemp, Chinese milk retch, and Chinese trumpet creeper.

Nonleguminosae green manure includes plants from the grass family (e.g. rye), the Cruciferae (e.g. fertilizing turnip), the composite family (e.g. swelt-stem chrysanthmum or little sunflower), Azolla imbricata, Pontederiaceae (e.g. water hyacinth) and Amaranthaceae (e.g. alternanthera philoxeroides).

### 3.1.6 Crop Straw

This type is one of the most important sources of organic fertilizer. Crop straw contains considerable amounts of nutritious elements necessary for crops such as N, P, K, Ca, and S. Under suitable conditions, with soil microbes, crop straw elements decompose and return elements and minerals to the soil that can be absorbed and utilized by future crops.

### 3.1.7 Sludge

This type is dredged from rivers, pools, canals, harbors and lakes.

### 3.1.8 Cake Fertilizer

This type is a fertilizer such as rapeseed cake, cottonseed cake, soybean cake, sesame cake, cater cake and tea seed cake.

### 3.2 Commercial Fertilizers

#### 3.2.1 Commercial Organic Fertilizers

This type refers to commercial fertilizers made from large amounts of biological substances, animal and plant remains, feces and biological waste.

#### 3.2.2 Humic Acid Fertilizers

This type contains humic acid substances such as peat (turf), lignite and dandy.

#### 3.2.3 Micro Fertilizers

Micro fertilizers refer to active microbiological preparations produced using a specific growth medium. Micro fertilizers are non-toxic, nonharmful, and do not cause pollution to the environment. Through the activity of specific microbes, micro fertilizers can improve the nutrition of plants, generate plants growing hormone, and boost the growth of plants. Micro fertilizers are divided into five categories in accordance with the different nutritional elements that are improved:

##### 3.2.3.1 Nitrogen

This type can form root nodules on leguminous plants and assimilate nitrogen from the air thus improving the nitrogenous nutrition of the leguminous plants. Groundnuts, soybeans, and mung beans have this ability.

##### 3.2.3.2 Nitrogen fixing Bacteria Fertilizer

This type can fix nitrogen from the air into the soil and at the roots of many crops while providing nitrogenous nutrition to the crops. A micro fertilizer can also excrete a hormone to stimulate the crop growth. These are azotobacteraceae and combined azotobacterins.

##### 3.2.3.3 Phospho Bacteria Fertilizer

This type can turn hard-to-dissolve soil phosphorus into usable soil phosphorus thus improving the phosphoric nitration of the crops. These are mycorrhiza, phosphobacteria, and phosphobacteriolysin,

##### 3.2.3.4 Silicate Bacteria Fertilizer

This type can release potassium into the soil by dissolving aluminosilicate such as mica, feldspar, and kietyoite that contain potassium, or by dissolving phosphorus and other ash elements thus improving crop nutrient conditions. These are silicate bacteria and other micro preparations that release potassium.

##### 3.2.3.5 Compound Microbiological Fertilizer

There are also types of compound micro fertilizers that are preparations containing 2 or more useful microbes (such as nitrogen-fixing bacteria, phosphobacteria, silicate bacteria or other bacteria) that do not counter-act, but rather enhance one or more crop nutrient elements and contain physiologically active substances.

#### 3.2.4. Semi-organic Fertilizer (Organic Compound Fertilizer)

This type is a compound made by mixing organic and inorganic fertilizer.

##### 3.2.4.1 Animal Waste and Inorganic Fertilizer

This type is made of treated livestock and poultry feces, that has had all harmful elements eliminated, combined with specific amounts of trace elements such as zinc, manganese, boron and molybdenum.

##### 3.2.4.2 Dried Compound Fertilizer Made of Fermented Waste Liquid

This type of fertilizer is made with dried materials from fermentation industry waste liquid and waste compounds that remain after breeding mushrooms or raising poultry.

#### 3.2.5 Inorganic (mineral) Fertilizer

This type is made of physically and chemically processed minerals that has nutrients in the form of inorganic salt.

##### 3.2.5.1 Mineral Potassium Fertilizer and Potassium Sulfate Fertilizer

##### 3.2.5.2 Mineral Phosphoric Fertilizer (ground phosphate rock)

##### 3.2.5.3 Roasted Calcium Magnesium Phosphate Fertilizer and Defluorated Phosphate Fertilizer

##### 3.2.5.4 Lime: limited only for use in acid soil

##### 3.2.5.5 Ground Sulfate Fertilizer: limited only for use in alkaline soil

#### 3.2.6 Foliage Fertilizer

This type is absorbed by plants after being sprayed onto the foliage. There must be no growth regulating agents in chemical compound foliage fertilizer.

##### 3.2.6.1 Trace Element Fertilizer

This compound consists of trace elements such as Cu, Fe, Wn, Zn, B, Mo and others.

##### 3.2.6.2 Accessory Substance Fertilizer to assist Plant Growth

This is a compound of liquid extracted from natural organic matter and fermentation liquid that has been used for inoculating useful bacteria. Additionally it contains humic acid, alginate acid, amino acid, vitamins and

sugar.

### 3.3 Other Fertilizers

3.3.1 Include organic by-products of from the food making or textile industry that do not contain compound additives.

3.3.2 Include fertilizers that are made of fish meal, oxen or sheep wool waste, bonemeal, amino acid residue, bone glue residue, livestock processing waste, and sugar refinery waste that does not contain preservatives.

## 4. Rules of Use

Fertilizer use must ensure that sufficient amount of organic substances return to the soil, thereby maintaining or increasing soil fertility and the biological activity of the soil. All organic or inorganic (mineral) fertilizers, especially nitrogen rich fertilizers, should be used in such way that will not harm either the environment or a crops nutrients, taste, quality and plant resistance.

### 4.1 Rules of Fertilizer Use for Class AA Green Food

4.1.1 Only fertilizer types that meet this standard can be used. Use of other chemical compound fertilizers is not permitted.

4.1.2 Harmful urban waste and sludge are not permitted for use as fertilizers. It is forbidden to collect medical and industrial waste that contains harmful substances such as toxic gas, pathogenic microorganisms and heavy metals for use as a fertilizer in green food production.

4.1.3 There are many methods to return straw fertilizers to the field including composts (composted manure, wet composted manure, methane manure), direct disposal, pressed straw, and as a field covering. Use will vary according to area conditions. When straw is placed into the soil directly, it should be covered with soil so that no root support is allowed. Animal and human urine that is nitrogen rich should be added to facilitate the decomposition of straw.

4.1.4 There are several methods for using green manure such as a direct application, with tillage, or as a compost. When cultivating green manure, it is ideal to overturn and cover the manure when it is in full bloom. The depth of cover should be about 15cm. Green manure should be covered completely by the soil and raked level. Seed planting or seedling transplanting should be performed only 15-20 days after green manuring.

4.1.5 Fermented methane fertilizer water that has met decontamination requirements and human or livestock fermented excrement and urine can be used as manure. Spraying unfermented human excrement and urine on crops or vegetables is strictly forbidden.

4.1.6 Cake fertilizers have positive effects on fruits and vegetables. Fermented cake fertilizers can be used in greater concentrations than normal.

- 4.1.7 Foliage fertilizers are applied onto crop foliage. Foliage fertilizers can be applied several times, but the last application should occur no sooner than 20 days before harvest.
- 4.1.8 Micro organic fertilizers can be used as an initial fertilizer or secondary fertilizer as well as mixed with seeds. Strictly follow the instruction manual when performing such an operation. Micro organic fertilizers reduce the number of nitrates in vegetables and improve vegetable quality. With adequate planning, micro organic fertilizers can be used in larger numbers on vegetables.
- 4.2 Rules of Fertilizer Use for Class A Green Food:
- 4.2.1 Attempts should be made to try and select the kind of fertilizers stipulated in this rule. If required for production, production bases can use limited amounts of certain chemical compound fertilizers. Nitrate type nitrogen fertilizers are forbidden.
- 4.2.2 Chemical fertilizers should be used in conjunction with organic fertilizers. The ratio of organic nitrogen to inorganic nitrogen should be 1:1, about 1000 kg animal manure and 20 kg urea (with animal manure as a primary fertilizer and urea as either a primary or secondary fertilizer). The last application of fertilizer should be done no sooner than 30 days before harvest.
- 4.2.3 Chemical fertilizers can be used with organic fertilizers and micro organic fertilizers, 1000 kg animal manure plus 10 kg urea or 20 kg dioammonium phosphate and 60 kg micro-organic fertilizers (with animal manure as basic fertilizer, urea, dioammonium phosphate and micro organic fertilizers as either basic fertilizers or additional fertilizers). The volume adjustment can be done for vegetables and fruits according to the above proportion. The last application of fertilizer should be done no sooner than 30 days before harvest.
- 4.2.4 Under certain conditions, urban residential waste is safe for use in fertilizers. Care should be given to prevent metal, rubber, and debris with special attention to heavy metal and harmful substances often found in housing refuse, from entering the fertilizer. Therefore urban residential refuse must be decontaminated and meet the state standards before being used as a fertilizers. The annual usage limit per *mu* (0.0667 hectares) is 3000 kg for cohesive soil and 2000 kg for sandy soil.
- 4.2.5 The same standards as 4.1.3 apply for the use of straw returned to fields with the exception that small amounts of nitrogen fertilizer for regulating the ratio of carbon and nitrogen can be used.
5. Other Rules
- 5.1 Burning straw with the intention of returning ash to the field should only be used where there is a serious occurrence of pests in the paddy. Avoid the approach of burning large amounts of straw.
- 5.2 All composts to be used as farm manure to produce green food (including human, livestock and poultry excrement and urine, straw, weeds or peat), should be fermented under temperatures high enough to kill all parasite eggs, pathogenic bacteria and seeds of weeds, harmful organic acid and harmful gases so that the standards of decontamination and hygiene are met. Farm manure should be produced and used locally. Farm manure from outside the area can only be used after confirmation that it has met the necessary requirements. Commercial fertilizers and new fertilizer types must pass the registration and

production licencing system by related government departments.

- 5.3 If fertilizer application causes soil and water source pollution or hampers crop growth and farm produce cannot meet the hygiene standards, such fertilizer use should be suspended and reported to the China Green Food Development Center and provincial Green Food Office. Food produced with such fertilizers can not use the registered green food mark.

Additional description:

Standard endorsed by the China Green Food. Development Center

Standard drafted by the Institute of Soil and Fertilizer, China Academy of Agricultural Science.

Chief authors: Li Yuanfang and Ceng Mu Xiang.

## Chapter Five: Pesticide Use Regulations in Green Food Production

### 1. Contents of Theme and Application Range

This regulation defines the types of pesticides, toxicity ratings, hygienic standards, and rules for pesticide use allowed in the production of Class AA and Class A Green Food.

This rule applies to all biogenic pesticides, pesticides of fossil fuel origin, and organic synthetic pesticides registered in China.

### 2. Terminology

#### 2.1 Green Food

Refers to safe, quality and nutritious food certified by specific authorities that bears the registered green food mark and is pollution free.

#### 2.2 Class AA Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production no harmful chemical compounds were used; that are produced and processed in accordance with specific production operation norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class AA Green Food.

#### 2.3 Class A Green Food

Refers to products: that are produced in a place where the ecological environment quality meets the required standards and that during production used some chemical compounds within a limited quantity; that are produced and processed in accordance with specific production operational norms; that the quality and packaging of which are found to have met the specific standards after inspection; that are authorized by relevant departments to use the registered mark of Class A Green Food.

### 3. Types of pesticides

3.1 Biogenic pesticides are pesticides that directly use the biological living body, substances that have biological activity generated during metabolism, or substances extracted from the biological body for the purpose of preventing and curing plant diseases or insect pests.

3.1.1 Microbiogenic Pesticides

3.1.1.1 Agricultural antibiotics

To cure mycosis: blasticidin, Kasugaryacin, polyoxin, Jingangmycin, agro-resistor 120  
Acaricides: Liuyangmycin, Huaguangmycin

3.1.1.2 Living Body Microorganic Pesticides

Fungus preparation: green muscardine fungus, Shandong No.1.  
Bacteria preparation: bacillus thuringiensis, emulsus bacillocin.  
Germicide: 5406, Caifengning B1  
Nematode: Insect pathogenic nematodes.  
Protozoa: microspore, protozoa  
Viruses: nuclear polygon virus, granulate virus.

3.1.2 Faunogenic Pesticides

Insect pheromones (e.g. sex element information).  
Living body preparation: natural animals of predatory and parasitic nature.

3.1.3 Florogenic Pesticides

Pesticides: pyrethrum, Tubatoxin, nicotine and plant oil emulsion.  
Germicide: garlicin  
Preventative preparation: margasine, toosendanin.  
Synergist: sesomyne

3.2 Pesticides of Fossil Origin

Inorganic compounds and petroleum whose effective elements come from fossil fuels .

3.2.1 Inorganic Preparations that Kill Mycosis and Bacteria.

Sulfur preparation: sulfur suspending agent, sulfur and lime sulfur concentrates.  
Copper preparation, copper sulfate, *wang-tong*, copper hydroxide and Bordeaux mixture.

3.2.2 Mineral Oil Emulsion

3.3 Synthetic Compound Pesticides

These pesticides are artificial compounds produced in organic chemical plants, including pesticides, acaricides,

germicides, and herbicides. These pesticides can be used in restricted amounts for the production of Class A Green Food.

#### 4. Rules of Use

Green food production should be based on the entire ecological system including crops, plant diseases and insect pests. Preventive measures should be taken to create environmental conditions that are unfavorable to the breeding of insect pests and plant diseases, but are favorable to the breeding for those predators of insect pests that preserve the balance of the agricultural ecological system, the variety of biological forms, and reduce the losses caused by all kinds of plant diseases and insect pests.

Agricultural measures should be prioritized. A series of measures should be taken such as selecting the types of grain that resist plant diseases and insect pests, treating seeds with non-chemical agents, cultivating strong seedlings, strengthening cultivation management, eliminating weeds during the crops middle growth period, cleaning fields, crop rotation, and interplanting.

Measures that lure pests to their death with lamps and attractive colors, catch pests mechanically, or eliminate weeds both mechanically and manually should be taken when ever possible to prevent diseases, pests and weeds. Under special circumstances, when pesticides are required, the following rules should be followed:

##### 4.1 Rules for Pesticide Use in the Production of Class AA Green Food.

- 4.1.1 Insecticide, germicide, preventative preparations, and synergist of plant origin are permitted for use. (E.g. Pyrethrum, Tubatoxin, tobacco water, garlicin, margosine, toosendanin, *yin-jian-su*, sesomyne).
- 4.1.2 Natural enemy animals with parasitic and predatory nature (e.g. trichogramma, Ladybug, Predacious mite, various predacious spiders, insect pathogen, etc.) are permitted to be released.
- 4.1.3 Insect pheromones (e.g. sex pheromones or other attractants) of animal and plant origin use is permitted in pest racquet organ.
- 4.1.4 Mineral oil emu and plant oil emu use is permitted.
- 4.1.5 Sulphur preparations and copper preparations pesticide of mineral origin use is permitted.
- 4.1.6 Microbe body lining pesticides (e.g. fungus preparations, bacteria preparations, virus preparations, actinomyces, *ji-kang-jun-ji*, insect etiology nematode, protozoon) use is permitted in restricted amounts.
- 4.1.7 Agricultural antibiotics (e.g. Kasugarnycin, Polyoxin, Jिंगgangmycin, agro-resistor 120 etc.) use is permitted in restricted amounts (e.g. for the prevention of fungus diseases or Liuyangmycin to prevent mites).
- 4.1.8 Synthesized organic chemicals (e.g. insecticide, acaricide, germicide, herbicide) and plant growth regulators are not permitted for use
- 4.1.9 Any preparation made by mixing pesticides of organic origin and sythetic origin is not permitted for

use.

#### 4.2 Rules for Pesticides Use in the production of Class A Green Food.

4.2.1 Pesticides of plant origin, animal origin and microbiological origin are permitted for use.

4.2.2 Preparations of sulfur and copper can be used in mineral origin pesticides.

4.2.3 Pesticides with extreme toxicity, high toxicity, and high residual rates or pesticides causing cancers, abnormality and abrupt change (see attached table 1) are strictly forbidden from use.

4.2.4 If required for production, it is permitted to use certain organic or synthetic chemical pesticides in limited quantities if the use of these chemicals is in strict accordance with the methods defined in attached Table 2.

4.2.4.1 The recommended pesticides with low toxicity and certain pesticides with medium toxicity are listed in attached Table 2. If it is necessary to use new varieties, not listed in attached Table 2, application should be filed with China Green Food Development Center for approval.

4.2.4.2 The residue level of organic and synthetic pesticides in agricultural products should be controlled strictly. The lowest residue limit of international standards or 1/2 of the state standard should be adopted.

4.2.4.3 The interval between the final application of pesticides and the day of harvest should be not less than the days defined in attached Table 2 (the final application time in the production of green food is stricter than the State standard safety interval).

4.2.4.4 Each organic or synthetic pesticide can be used only once during the growing period of a crop (The frequency of use is much lower than the State standard).

4.2.4.5 When using biological origin pesticides and organic or synthetic pesticides, only those listed in attached Table 2 can be used for the mixed preparation of chemical pesticides.

4.2.4.6 The use of any genetically modified organisms (GMO) should be controlled strictly.

**Attached Table 1**

Chemical pesticides varieties forbidden from use in the production of Class A Green Food

Type	Name of Pesticide	Crops Forbidden to be Used	Reasoning
Organic arsenic pesticides	Calcium arsenate, lead arsenate	All crops	High toxicity
Organic arsenic germicides	Methyl zinc arsonate, methyl ferrous-ammonium arsonate, methyl asomate, asomate	All crops	High residue hazard
Organic tin germicides	Triphenyl tin acetate, triphenyl tin chloride and fentin hydroxide	All crops	High residue hazard
Organic mercuric germicides	Ethyl mercury chloride, phenylmercuric acetate	All crops	Extreme toxicity, high residue hazard
Fluoride preparations	Calcium fluoride, Sodium fluoride, sodium fluoroacetate, flutritex, cryolite, sodium fluorosilicate	All crops	Extreme toxicity, high toxicity, easy to cause pesticide harm
Organic chloride pesticide	DDT, benzex, lindane, drinox, Dieldrite	All crops	High residue hazard
Organic chloride acaricide	Dicofol	Vegetables and fruit trees	Certain amount of DDT is contained in industrial products
Haloalkane fumigate pesticides	Dimethyl dibromide, dibromochloropropane	All crops	Causes cancer and abnormalities
Organic phosphate pesticides	methsolfoton, disolfoton, Azodrin, parathion, methyl parathion, methamidophos, sulfotep, flolimat, phosphoamidon	All crops	High toxicity
Organic phosphate germicides	Kitazine, isokitazine	All crops	Rice with bad odor
Amino-based formic pesticides	aldicarb, aminocarb	All crops	High toxicity
Dimethyl formamidine pesticides and acaricides	Chlorphenamidine	All crops	Chronic toxicity, causes cancers
Synthetic pyrethroid insecticides	All synthetic pyrethroid insecticides	Paddy rice	Large toxicity to fish
Substituted benzene-group pesticides and germicides	Penlachloronitrobenzene, blastin	All crops	There is a foreign report that these pesticides have caused cancers or secondary phytotoxicity

Plant growth regulator	Organic synthetic plant growth regulator	All crops	
Benzyl ether group herbicides	Nitrogen, <i>cao-ku-mi</i>	All crops	Chronic toxicity
Herbicides	All kinds of herbicides	Vegetables	

## Attached Table 2

The types of chemical pesticides, toxicity rating, final allowable residue limit, the interval between final pesticide application and date of harvest, and methods of use are below:

### 1. Organic pesticides and acaricides

#### 1.1 Organic phosphate pesticides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Dichlorvos	Medium	0.1 (0.2)	Tea 10 (6)	50% emulsion 150-250g (1,000-800 times)	Mist spraying once
		0.1 (0.2)	Vegetables 10 (7)	80% emulsion 100-200g (1,000-500 times)	Mist spraying once
Dimethoate	Medium	0.05 (0.05)	wheat, corn, sorghum 15 (10)	40% emulsion 100-125g	Mist spraying once
		0.5 (1)	Vegetables 15 (9)	40% emulsion 50-100g	Mist spraying once
		0.5 (1)	Apple 30 (7)	40% emulsion 1,500-1,000 times	Mist spraying once
		0.5 (1)	Orange 20 (15)	40% emulsion 1,500-500 times	Mist spraying once
		0.5 (1)	Tea 15 (7)	40% emulsion 2,000-1,000 times (125-175g)	Mist spraying once
Fenitrothion	Medium	1 (5)	Paddy rice 20 (14)	50% emulsion 75-100 ml	Mist spraying once
		0.2 (0.5)	Tea 15 (10)	50% emulsion 200-300g	Mist spraying once
		0.2 (0.5)	Apple 30 (15)	50% emulsion 1,500-1,000 times	Mist spraying once
Malathion	Low	1 (3)	Paddy rice 15 (7)	50% emulsion 75-100g	Mist spraying once
		0.1 (0.3)	Tea 15 (10)	50% emulsion 150-300g	Mist spraying once
		Cannot be detected	Vegetables (cannot be used)		

Phoxim	Low	0.05 (0.05)	Used for wheat and corn seed application	50% emulsion 0.1-0.2 seeds amount	Seed application
		0.05 (0.05)	Not less than 10 days for green vegetables, white cabbage and cucumber (7)	50% emulsion 50-100 ml (2,000-500 times)	Mist spraying once
		0.05 (0.05)	Apples 30 (30)	50% emulsion 1,500-2,500 times	Mist spraying once
		0.2 (0.5)	Tea 10 (6)	50% emulsion 200-300g, 1,000 times	Mist spraying once
Trichlorphon	Low	0.05 (0.1)	Paddy rice 15 (7)	90% solid 100g	Mist spraying once
		0.1 (0.2)	Vegetables 10 (7-8)	90% solid 100g (1,000-500 times)	Mist spraying once
		0.1 (0.2)	Citrus 25 (20)	90% solid 1,000-500 times	Mist spraying once

Note: The figures in the parenthesis of allowed final residue amount refer to state and international standards, similarly hereinafter.

The figures in the parenthesis of the interval between final application and date of harvest refer to state and international standards, similarly hereinafter.

### 1.2 Amino-based formate group pesticides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
BPMC	Low	0.1 (0.3)	Paddy rice 30 (21)	50% emulsion 80-120 ml	Mist spraying once
Carbaryl	Medium	1 (5)	Paddy rice 40 (northern) (30) Paddy rice 15 (southern) (10)	8% powder 1,500-2,000g 25% soluble powder 200-250g	Mist spraying once Mist spraying once
Isoprocarb	Medium	0.1 (0.2)	Paddy rice 40 (30)	2% powder 1,500 g	Mist spraying once
MTMC	Medium	0.1 (0.2)	Paddy rice 30 (30)	25% soluble powder 200-300g	Mist spraying once

Primicarb	Medium	0.5 (1)	Soybean 15 (10)	50% soluble powder 10-16g	Mist spraying once
		0.5 (1)	Leaf vegetable 10 (6)	50% soluble powder 10-30g	Mist spraying once
		0.05 (0.05, wheat grain)	Wheat 20 (14)	50% soluble powder 10-20g	Mist spraying once
		0.1 (0.2, vegetable seed)	Rapeseed 10 (4)	50% soluble powder 12-20g	Mist spraying once

### 1.3 Pyrethrin group pesticides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Cypermethrin	Medium	0.5	Leaf vegetables 7 (2-5)	10% emulsion 20-30ml	Mist spraying once
		0.2	Tomato 5 (1)	25% 12-16 ml	Mist spraying once
		0.2(0.5)	Apple 30 (21)	10% 20-30ml	Mist spraying once
		1(2)	Orange (peaches)	10% emulsion 4,000- 2,500 times	Mist spraying once
Deltamethrin	Medium	1(2)	Orange (peaches)	25% 4000-500	Mist spraying once
		5 (20)	Tea 15 (7)	10% emulsion 4,000- 2,000 times	Mist spraying once
		0.2 (0.5)	Leaf vegetables 7 (2)	10% emulsion 6,000- 3,000 times	Mist spraying once
		0.05 (0.1)	Apples 30 (5)	2.5% emulsion 20- 40ml	Mist spraying once
Deltamethrin	Medium	0.05 (0.05)	Orange 30 (28)	2.5% emulsion 2,500- 1,250 times	Mist spraying once
		4 (10)	Tea 15 (5)	2.5% emulsion 2,500- 1,250 times	Mist spraying once
		0.2 (0.5)	Wheat 20 (15)	2..5% emulsion 1,500- 800 times]	Mist spraying once
		0.1 (0.1)	Soybean 15 (7)	2.5% emulsion 10-15 ml	Mist spraying once
				2.5% emulsion 15-25 ml	Mist spraying once.

Fenvalerate	Medium	0.1 (0.2)	Wheat 20 (15)	20% emulsion 20-5ml	Mist spraying once
		0.1 (0.2)	Orange 30 (20)	20% emulsion 6,000-4,000 times	Mist spraying once
		0.1 (0.2)	Apple 30 (18)	20% emulsion 4,000-1,600 times	Mist spraying once
		0.1 (0.2)	Tea 15 (10)	20% emulsion 8,000-6,000 times	Mist spraying once
		0.2 (0.5)	Leaf vegetables 10,15 (5, 12)	20% emulsion 15-40ml	Mist spraying once
		0.1 (0.2)	Tomato 10 (3)	20% emulsion 30-40ml	Mist spraying once
		0.1 (0.1)	Soybean 15 (10)	20% emulsion 10-40 ml	Mist spraying once

#### 1.4 Other pesticides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Buprofezin	Low	0.2 (0.3)	Paddy rice 20 (14)	25% soluble powder 25-35g	Mist spraying once
Chlorfluazoron	Low	0.2 (0.5)	Cabbage 12 (7)	5% emulsion 40-80ml	Mist spraying once
Diflubenzuron	Low	0.2 (0.5)	Wheat 30 (21)	25% soluble powder 10-20g	Mist spraying once
		0.5 (1.0)	Apple 30 (21)	25% soluble powder 2,000-1,000 times	Mist spraying once
<i>Mie-yu-niao</i>	Low	1 (3.0)	Wheat 30 (15)	25% suspending agent 35-50ml	Mist spraying once
<i>Sha-chong-shuang</i>	Medium	0.1 (0.2, rice)	Paddy rice 20 (15)	17% water agent 250g	Mist spraying once

#### 1.5 Acaricides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Amitraz	Low	0.2 (0.4)	Apple 40 (30)	20% emulsion 1,000 times	Mist spaying once
		0.2 (0.5)	Orange 30 (21)	20% emulsion 1,500-1,000 times	Mist spaying once
Hexythiazox	Low	0.2 (0.5)	Apple 40 (30)	5% soluble powder 2,000 times	Mist spaying once
		0.2 (0.5)	Orange 30 (30)	5% emulsion 2,000-1,500 times	Mist spaying once

Propargite	Low	2 (5)	Apple 40 (30)	73% emulsion 3,000-2,000 times	Mist spaying once
		1 (3)	Orange 30 (30)	73% emulsion 3,000-2,000 times	Mist spaying once

## 2. Organic germicides

### 2.1 Organic sulfur germicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Thiram	Low	0.2 (0.2, wheat grain)	Seed application before the sowing of spring wheat)	75% Thiram soluble powder, containing Thiram 37.5% (Carboxin 37.5) 2.5-2.8/kg seeds	Seed application

### 2.2 Substituted benzene group germicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Chlorothalonil	Low	0.2 (0.2)	Paddy rice15 (10)	75% soluble powder 100g	Mist spaying once
		1(1)	Tomato30(23)	75% soluble powder 100-200g	Mist spaying once
		0.1 (0.1, peanut)	Peanut 20(14)	75% soluble powder 100-160g	Mist spaying once
		1 (1)	Apple 30 (20)	75% soluble powder 600 times	Mist spaying once
		1 (1)	Pear 30 (25)	75% soluble powder 600 times	Mist spaying once
		1 (1)	Grape 30 (21)	75% soluble powder 600 times	Mist spaying once
Matalaxyl	Low	0.2 (0.5) 0.5 (1) 0.05 (0.05)	Cucumber Grape Grain seed application	50% soluble powder(?) 75-120g 35% seed application agent 200-300g for 100 kg seeds	Mist spraying once  Dry or wet application

Thiophanate-methyl	Low	0.1(0.1, rough rice)	Paddy rice 35 (30)	50% suspending agent 100-150ml 70% soluble powder 100-140g	Mist spraying once Mist spraying once
		0.1(0.1, wheat grain)	Wheat 35 (30)	70% soluble powder 70-100g 50% suspending agent 100-150ml	Mist spraying once Mist spraying once

### 2.3 Heterocyclic-nitrogen group fungicides

Name of pesticides	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Carbendazim	Low	0.2(0.5, rough rice) 2(0.5, wheat grain) 0.2(0.5)	Paddy rice 35 (30) Wheat 25 (20) Cucumber 10 (7)	50% soluble powder 50g 50% soluble powder 75-150g 25% soluble powder 1,000-500 times	Mist spraying once Mist spraying once Mist spraying once
Carboxin	Low	0.2(0.2, wheat grain)	Seed application before sowing of the spring wheat	75% thiram soluble powder , containing 37.5% of carboxin 2.5-2.8/kg seeds	Seed application
Hymexazol	Low	0.5(0.5, rough rice) 0.5 (0.5, beet root)	Used for treatment of paddy rice seedbed or treatment of seeds of paddy rice and beet root	30% water agent 3-6 ml/m <sup>2</sup> seedbed 70% soluble powder 4-7kg/kg seeds	From the sowing of seedlings before planting rice to the seed application during the seedling stage
Iprodione	Low	10 (10, banana) 2 (10) 0.2 (0.2, rapeseed)	Immersing bananas Apples 20 (7) Rapeseed 50 (50)	25% suspending agent, 1,500 ppm 50% soluble powder 1,500-1,000 times 25% suspending agent 140-200ml	After immersing bananas for 2 minutes, take them out, air dry and store them. Mist spraying once Mist spraying once
Isoprothiolane	Low	1 (2, rough rice)	Early rice 20 (14) Late rice 35 (28)	40% emulsion or soluble powder 70-100g	Mist spraying once Mist spraying once

Procymidone	Low	1 (2, rapeseed) 1 (2)	Rapeseed 30 (25) Cucumber 5 (1)	50% soluble powder 30-50 g 50% soluble powder 40-50 g	Mist spraying once Mist spraying once
Thiabendazole	Low	10 (10, citrus) 0.4 (0.4, flesh of bananas)	Immersing fruit Immersing fruit	45% suspending agent 450 times 45% suspending agent 900-600 times	After immersing them for one minute, take them out, air dry and store them.
Triadimefon	Low	0.2 (0.5, wheat grain) 0.1(0.2) 0.1(0.2) 0.1(0.2)	Wheat 40 (30) Apple, chili, tomato, grape cucumber 7-10 (5)	25% soluble powder 35-60g 20% soluble powder 1,000-500 times	Mist spraying once Mist spraying once
Tricyclazole	Medium	1 (2, rough rice)	Paddy rice 30 (21)	70% soluble powder 20-30g	Mist spraying once

### 3. Herbicides

#### 3.1 Phenoxy carboxylic acid herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesµmu or ml/timesµ mu or dilution times	Methods of application and maximum times of application
Diclofop-methyl	Low	0.1 (wheat grain) 0.1 (beet root)	Applying them when wild oat at 3-5 leaf stage, weeds 2-4 leaf stage	36% emulsion 130-170ml 36% emulsion 130-200 ml	Mist spraying once Mist spraying once
Fluozifop-butyl	Low	1 (soybean seed) 1 (peanut kernel)	Applying them when the crops are at seedling stage and weeds at 3-5 leaf stage	35% emulsion 30-100ml 35% emulsion 50-100ml	Mist spraying once Mist spraying once

Fluozifop-p-butyl	Low	0.1 (soybean seed)	Applying them when the crops are at seedling stage and weeds at 3-5 leaf stage	15% emulsion 50-60ml	Mist spraying once
		0.1 (peanut kernel)		15% emulsion 50-100ml	Mist spraying once
		0.1 (rapeseed)	Applying them when rapeseed is at seedling stage and weeds at 1-4 leaf stage	15% emulsion 30-40ml	Mist spraying once
		0.1 (beet)	Applying them when beet is at seedling stage and weeds at 3-5 leaf stage	15% emulsion 50-65 ml	Mist spraying once
Quizolofop-ethyl	Low	0.1 (soybean seed)	Soybean 1-4 leaves compound leaf stage	10% emulsion 65-85ml	Mist spraying once
		0.2 (beet root)	Beet 4-5 leaf stage	10% emulsion 65-85ml	Mist spraying once

### 3.2 Benzoic acid herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Dicamba	Low	0.5 (wheat grain)	From the 3-leaf stage of wheat to the end of tillering stage	48% water agent 20-5 ml	Mist spraying once
		0.5 (corn)	Corn 4-6 leaf stage	48% water agent 25-40ml	Mist spraying once

### 3.3 Benzyl ether herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesCmu or ml/timesC mu or dilution times	Methods of application and maximum times of application
Acifluorfen sodium	Low	0.1 (soybean seed)	Eliminating broad-leaf weeds in soybean and peanut fields, application when weeds are at 1-4 leaf stage after sowing of soybeans	24% water agent 60-100ml	Mist spraying once

Fomesafen	Low	0.05 (soybean seed)	1-3 compound leaf after leaf sprouting of soybean, weeds at 2-5 leaf stages	25% water agent 65-130ml	Mist spraying once
Oxyfluorfen	Low	0.05 (coarse rice)	5-7 days after planting of rice seedlings, spraying after mixing it with fine soil 10-15 kg	23.5% emulsion 10-35 ml	Mist spraying once

Note: The final allowable residue in the table of herbicides is the same as that of China.

### 3.4 Acetamide-group herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Butachlor	Low	0.5 (coarse rice)	2-3 days before planting of rice seedling or 4-5 days after planting of seedlings	60% emulsion 85-140ml 5% grain agent 1,000-1,600g	Mist spraying or spreading pesticide-clay mixture pesticide-clay mixture
Metotachlor	Low	0.1 (soybean seed)  0.5 (peanut kernel)	Application before soybean sprouts, Avoid using it in regions that have plenty of precipitation, where the earth is sandy and which have high level of underground water Mist spraying to soil before and after sowing of peanut.	72% emulsion 25-75g  72% emulsion 100-150ml	Mist spraying once

### 3.5 Carbamate herbicides and sulphocarbamate herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
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Thiobencarb	Low	0.2 (coarse rice)	Mist spraying or pesticide-clay mixture once in seedling field or 5-7 days before or after planting of seedling	50% emulsion 330-500ml High content thiobencarb 90% emulsion 150-220ml	Mist spraying once Mist spraying once
Triallate	Low	0.05 (wheat grain)	5-7 days before sowing of spring wheat and mixing of soil	40% emulsion 150-200ml	Mist spraying once
Vernolate	Low	0.1 (soybean grain)	Application once to soil before sowing, covering earth 507 centimeters	88.5% emulsion 170-225ml	Mist spraying once

### 3.6 Trizine herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Metribuzin	Low	0.1 (soybean seed)	Application to soil before and after sowing	70% soluble powder 25-75g	Mist spraying once
Simetryne	Low	0.02 (rough rice)	Treatment of soil before sowing	25% soluble soil 100-200g	Mist spraying or pesticide-clay mixture

### 3.7 Sulfonylurea herbicides

Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/times $\mu$ or ml/times $\mu$ or dilution times	Methods of application and maximum times of application
Bensulfuron-methyl	Low	0.02 (coarse rice)	Application 5-7 days before planting of seedlings and preserving water for one week	10% soluble powder 13-25g	Mist spraying once

### 3.8 Other herbicides

Types	Name of pesticide	Acute oral toxicity	Final allowable residue (mg/kg)	Interval between final application and date of harvest (days)	Normal amount of preparation g/timesµm or ml/timesµm or dilution times	Methods of application and maximum times of application
Quaternary ammonium salt herbicides	Paraquat	Medium	1 (orange, whole fruit)	Application very low when weeds grow thick and avoid application to orange trees	20% water agent 200-300ml	Mist spraying once
Cyclohexane ketone herbicides	Sethoxydim	Low	2 (soybean seed) 2 (peanut kernel) 1 (rapeseed, linseed) 5 (cottonseed) 0.5 (beet)	During the seedling period of crops, application at 3-5 leaf period of annual grass family weed	20% emulsion 60-100ml 12.5% oil emulsion 65-100ml 20% emulsion 65-120ml 20% emulsion 85-100 ml 20% emulsion 100-150ml	Mist spraying once Mist spraying once Mist spraying once Mist spraying once Mist spraying once
Dinitroaniline herbicides	pendimethalin	Low	0.1 (corn seed) 0.2 (leaf vegetable) (peanut)	Mist spraying to soil 5 days after sowing of corn or before seeds sprout Mist spraying to soil before transplanting of leaf vegetables and raking even after application Application after sowing of peanut or before seeds sprout.	33% emulsion 150-200ml 33% emulsion 100-150ml	Mist spraying once Mist spraying once
Dinitroaniline herbicides	Trifluralin	Low	0.01(corn seed) 0.01(soy bean seed)	Application to soil before sowing of corn and soybean, than raking even afterwards	48% emulsion 75-100ml 48% emulsion 125-175 ml	Mist spraying once Mist spraying once

Heterocyclic nitrogen-group herbicides	Bentazone	Low	0.05(coarse rice)  0.05(soy bean seed)	Application once 20-30 days after planting of seedlings and preventing annual broad leaf weeds and nutgrass flatsedge Application once when soybean at 2-3 compound leaves stage	48% liquid 150-200ml  48% liquid 160-200ml	Mist spraying once  Mist spraying once
	Oxadiazon	Low	0.05(coarse rice) 0.2(rice straw) 0.3(peanut kernel)	Application when turning green after sowing  Application before seeds sprout	25% emulsion, 165-230ml per mu for northern dry land and 65-100ml for southern seed planting 25% emulsion 100-150ml	Mist spraying once  Mist spraying once
Imidazoline ketone herbicides	Pursuit Imazethaphr	Low	(soybean seed)	Treatment of mixing soil before sowing of soybean; treatment of soil before or after seeds sprout after sowing	5% water 100-134ml	Mist spraying once
	Difenzoquat	Low	0.05(wheat grain)	Application once when wild oat is at 3-5 leaf stage	64% soluble powder 5-150g, added with water 50l	Mist spraying once

## Additional descriptions:

This standard endorsed by the China Green Food Development Center.

This standard drafted by the Beijing University of Agriculture and the Institute of Inspection and Testing of Pesticides of the Ministry of Agriculture

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