

THE REGULATION OF MINISTER OF AGRICULTURE

NUMBER : 43/Permentan/OT.140/6/2012

REGARDING

PLANT QUARANTINE MEASURES FOR IMPORTATION OF  
FRESH VEGETABLE BULBS INTO THE TERRITORY OF THE  
REPUBLIC OF INDONESIA

IN THE MERCY OF THE GREAT UNITY, GOD

MINISTER OF AGRICULTURE,

- Considering : a. that under the Regulation of Minister of Agriculture Number: 18/Permentan/OT.140/2/2008, the Regulation of Minister of Agriculture Number 90/Permentan/OT. 140/12/2011 and the Regulation of Minister of Agriculture Number 16/Permentan/OT.140/3/2012, the technical requirements and Plant Quarantine Measures for importation of Alive Plant Produces, namely Fresh Vegetable Bulb into the Territory of the Republic of Indonesia have been established;
- b. that in the development of science and technology in the sector of plant

quarantine for treatment of the plant pest organism carriers which are free of any quarantined plant pest organism, then the Regulation of Minister of Agriculture Number 18/Permentan/OT.140/2/2008, the Regulation of Minister of Agriculture Number 90/Permentan/OT.140/12/2011 and the Regulation of Minister of Agriculture Number 16/Permentan/OT.140/3/2012 shall be no longer appropriate.

c. that based on the aforesaid matters, it is necessary to regulate Plant Quarantine Measures for Importation of Fresh Vegetable Bulbs Into The Territory of The Republic of Indonesia;

- In view of :
1. The Laws Number 16 of 1992 on Animal, Fish and Plant Quarantines (The State Gazette of the Republic of Indonesia Number 56 of 1992, the Additional State Gazette of the Republic of Indonesia Number 3482);
  2. The Laws Number 7 of 1994 on Ratification for Agreement of Establishing The World Trade Organization (The State Gazette of the Republic of Indonesia Number 57 of 1994, the Additional State Gazette of the Republic of Indonesia Number 35);
  3. The Laws Number 7 of 1996 on Food (The State Gazette of the Republic of Indonesia Number 99 of 1996, the

- Additional State Gazette of the Republic of Indonesia Number : 3817);
4. The Laws Number 13 of 2010 on Horticulture (The State Gazette of the Republic of Indonesia Number 132 of 2010, the Additional State Gazette of the Republic of Indonesia Number : 5170);
  5. The Laws Number 14 of 2002 on Plant Quarantine (The State Gazette of the Republic of Indonesia Number 35 of 2002, the Additional State Gazette of the Republic of Indonesia Number 4196);
  6. The Government Regulation Number 28 of 2004 on Food Safety, Quality and Nutrient (The State Gazette of the Republic of Indonesia Number 107 of 2004, the Additional State Gazette of the Republic of Indonesia Number 4424);
  7. The Presidential Decree Number 2 of 1977 connected with the Presidential Decree Number 45 of 1990 on Ratification for International Plant Protection Convention 1951;
  8. The Presidential Decree Number 58 of 1992 on Ratification for Asian Plant Protection Convention;
  9. The Presidential Regulation Number 47 of 2009 on Formation and Organization of State Ministry;
  10. The Presidential Decree Number 84/P of 2009 on Formation of United Indonesian Cabinet II;

11. The Presidential Regulation Number 24 of 2010 on Position, Rule and Function of State Ministry, and Organizational Structure, Rule and Function of Echelon I;
12. The Regulation of Minister of Agriculture Number 22/Permentan/OT.140/OT.140/4/2008 on Organization and Work System of Technical Executive Unit For Agricultural Quarantine;
13. The Regulation of Minister of Agriculture Number 09/Permentan/OT.140/2/2009 on Requirement and Procedure of Plant Quarantine Measures for Importation of Quarantined Plant Pest Organism Carriers Into The Territory of The Republic of Indonesia (The State Gazette of the Republic of Indonesia Number 35 of 2009);
14. The Regulation of Minister of Agriculture Number 61/Permentan/OT.140/10/2010 on Organization and Work System of The Ministry of Agriculture;
15. The Regulation of Minister of Agriculture Number 88/Permentan/PP.340/12/2011 on Food Safety Control Against Importation and Exportation of Fresh Food of Plant Origin (The State Gazette of The Republic of Indonesia of 2011 Number 842);
16. The Regulation of Minister of Agriculture Number 93/Permentan/OT.140/12/2011 on Type of Quarantined Plant Pest

Organism (The State Gazette of The Republic of Indonesia Number 6 of 2012);  
17. The Regulation of Minister of Agriculture Number 94/Permentan/OT.140/12/2011 on Entry and Exit Points for Carriers of Quarantined Plant Pest Organisms (The State Gazette of The Republic of Indonesia Number 7 of 2012);

Taking Note of : 1. WTO's Notification Number G/SPS/N/IDN/37 dated 26<sup>th</sup> October 2007;  
2. WTO's Notification Number G/SPS/N/IDN/47 dated 7<sup>th</sup> May 2012;

HAS DECIDED :

To Stipulate : THE REGULATION OF MINISTER OF AGRICULTURE REGARDING PLANT QUARANTINE MEASURES FOR IMPORTATION OF FRESH VEGETABLE BULBS INTO THE TERRITORY OF THE REPUBLIC OF INDONESIA

## CHAPTER I GENERAL PROVISIONS

### Article 1

In this Regulation the following meanings:

1. Fresh Vegetable Bulb, hereinafter referred to as Bulb is a part of plant in the form of bulb included in the Allium family, either whole or its parts that have not been yet processed into manufactured materials.

2. Quarantined Plant Pest Organism, hereinafter referred to as OPTK, is all plant Pest Organisms specified by the Minister of Agriculture in order to be prevented for both their importation into and their spread within the territory of the Republic of Indonesia.
3. Phytosanitary certificates is a certificate issued by the competent authorities from the country of origin or the country of transit stating Bulbs are free of quarantined Plant Pest Organisms (OPTK) and have met the specified plant quarantine requirements and / or stating other necessary information.
4. Entry Points are seaports, river ports, crossing seaports, airports, post offices, border posts with other countries and other places as may be deemed necessary, designated as locations for importation of quarantined plant pest organism carriers.
5. Plant Quarantine Officer is a specific civil servant assigned to perform plant quarantine measures pursuant to the applicable laws and regulations.
6. Owner of Bulbs or His Proxy, hereinafter referred to as the owner or his proxy, is a person or legal entity that owns and / or is responsible for importation of alive plant produces, namely fresh vegetable bulbs.

## Article 2

- (1) This regulation is intended as a basis for importation of Bulbs into the territory of the Republic of Indonesia and the implementation of plant quarantine measures.
- (2) This regulation is aimed at preventing the entry of OPTK (Quarantined Plant Pest Organism) into the territory of the Republic of Indonesia and complying with the fresh food

safety of plant origin.

### Article 3

The scope of this regulation shall include plant quarantine measures and entry points.

## CHAPTER II QUARANTINE REQUIREMENTS

### Article 4

- (1) The Bulbs may be imported to the territory of the Republic of Indonesia from the production area in the country of origin which is free or not free of any OPTK (Quarantined Plant Pest Organism) infestation.
- (2) The Bulbs referred to in paragraph (1) shall be free of roots, leaves, and particles of soil / compost.

### Article 5

- (1) The production area in the country of origin which is free of any OPTK infestation referred to in Article 4 shall be determined by the Chief of Agricultural Quarantine Agency on behalf of the Minister under a decree.
- (2) The procedure for the determination of a production area in the country of origin which is free of any OPTK infestation referred to in paragraph (1) shall be made under the provisions of the applicable laws and regulations.

### Article 6

- (1) In case the bulb comes from the production area in the country of origin which is not free of any OPTK infestation referred to in Article 4, treatment measures such as

fumigation or irradiation shall be taken.

- (2) The types of Bulbs, OPTK (Quarantined Plant Pest Organisms) and treatment referred to in paragraph (1) as listed in the appendix are as the inseparable parts of this Regulation.

## Article 7

- (1) The importation of Bulbs referred to in Article 4 and Article 6 shall comply with the requirements of the fresh food safety of plant origin.
- (2) The food safety requirements referred to in paragraph (1) shall comply with the laws and regulations on fresh food safety of plant origin.

## CHAPTER III PLANT QUARANTINE MEASURES

### Article 8

- (1) Any Bulb imported to the territory of the Republic of Indonesia shall:
  - a. be completed with a Phytosanitary Certificate issued by both the country of origin and the country of transit;
  - b. pass through the designated entry point; and
  - c. be reported and submitted to the Quarantine Officer at the entry point for purpose of a plant quarantine measure.
- (2) The Phytosanitary Certificate as referred to in paragraph (1) letter a, for importation of the Bulbs derived from the production area in the country of origin which is free of any OPTK (Quarantined Plant Pest Organism) infestation,



- shall contain statements that:
- a. the bulbs are derived from the production area that is free of any OPTK infestation; and
  - b. the bulbs are free of roots, leaves and particles of soil / compost.
- (3) The Phytosanitary Certificate referred to in paragraph (1) letter a, for the bulbs derived from the production area in the country of origin which is not free of any OPTK infestation, shall contain statements that:
- a. a treatment measure/action, namely fumigation or irradiation has been taken, and
  - b. the bulbs are free of roots, leaves and particles of soil / compost.
- (4) The statements referred to in paragraph (2) and paragraph (3) letter b shall be expressed in the additional declaration column .
- (5) The statement referred to in paragraph (3) letter a shall be expressed in the treatment column.

#### Article 9

- (1) The Owner or His Proxy shall report and deliver the Bulbs to the Quarantine Officer at the entry point.
- (2) The report referred to in paragraph (1) shall be made no later than the time when the Bulbs arrive at the entry point, equipped with the required documents.

#### Article 10

- (1) The quarantine officer shall take an administrative examination on the required documents so as to find out the completeness, correctness and validity of document.
- (2) In case, the result of administrative examination on the

Phytosanitary Certificate referred to in paragraph (1), is proven not to include the following statements:

- a. The products are derived from the production area in the country of origin which is free of any OPTK infestation, free of roots and leaves, and as well as free of particles of soil / compost as referred to in Article 8; or
  - b. treatment measures have been carried out, free of roots and leaves, and free of particles of soil/ compost as referred to in Article 8;
- it shall be rejected.

#### Article 11

In case, the result of administrative examination as referred to in Article 10 is proven:

- a. incomplete, then a detention shall be made;
- b. complete, valid and correct, a medical examination shall be taken.

#### Article 12

- (1) The medical examination referred to in Article 11 letter b shall be taken for detecting any possibility of pest organisms (OPTK) and to know the physical condition of Bulbs.
- (2) In case, the result of medical examination referred to in paragraph (1), is proven:
  - a. not free of class-I OPTK, rotten or damaged, then the bulbs shall be destroyed;
  - b. not free of roots, leaves, or particles of soil / compost, the bulbs shall be rejected;

- c. not free of Class-II OPTK (Quarantined Plant Pest Organism), treatment to the bulbs shall be made; or
  - d. free of OPTK, roots, leaves, and particles of soil / compost, deliverance to the bulbs shall be made.
- (3) The deliverance referred to in paragraph (2) letter c, may be done if the Bulbs have complied with the laws and regulations on fresh food safety of plant origin.

### Article 13

The actions of administrative examination, medical examination, detention, denial, treatment, disposal and deliverance referred to in Article 10, Article 11 and Article 12 shall be carried out pursuant to the provisions of the applicable laws and regulations.

## CHAPTER IV ENTRY POINTS

### Article 14

- (1) The Entry Points for Bulbs referred to in Article 8 paragraph (1) letter b shall consist of:
- a. Tanjung Perak Seaport, Surabaya;
  - b. Belawan Seaport, Medan;
  - c. Soekarno-Hatta Airport, Jakarta, and
  - d. Soekarno-Hatta Seaport, Makassar.
- (2) Besides the entry points referred to in paragraph (1), the entry points defined under the laws and regulations on Free Trade Zone and Free Port may be used as entry points for Bulbs.
- (3) Importation of Bulbs via the entry points referred to in paragraph (2) may be done only to meet the need of



consumption and shall be prohibited from being distributed outside the Free Trade Zone and Free Ports.

- (4) The terms and conditions of entry point referred to in paragraph (1) shall not apply to any importation of the Bulbs derived from the production area which is free of any fruit fly infestation in the country of origin as specified in Article 5, or in the countries whose food safety systems have been recognized.

CHAPTER V  
CLOSING  
Article 15

Upon enactment of this Regulation, then the Regulation of Minister of Agriculture No. 18/Permentan/OT.140/2/2008, the Regulation of Minister of Agriculture No. 90/Permentan/OT.140/12/2011 and the Regulation of Minister of Agriculture No. 16/Permentan/OT.140/3 / 2012 shall be revoked and declared no longer effective.

Article 16

This Regulation shall take effect on 19<sup>th</sup> June 2012.  
For public cognizance, this Ministerial Regulation shall be enacted by placing it in the State Gazette of the Republic of Indonesia.

Enacted in Jakarta  
on 13<sup>th</sup> June 2012

MINISTER OF  
AGRICULTURE,

(signed)

SUSWONO

Promulgated in Jakarta

On

MINISTER OF LAW AND HUMAN RIGHTS OF  
THE REPUBLIC OF INDONESIA

AMIR SYAMSUDIN

THE STATE GAZETTE OF THE REPUBLIC OF INDONESIA  
NUMBER ..... OF 2012

Source: <https://www.ippc.int/en/countries/indonesia/reportingobligation/4>, called 28 February, 2017

#### APPENDIX MINISTER OF AGRICULTURE

NUMBER : 43/Permentan/OT.140/6/2012

DATE : June 13, 2012

#### TYPES OF QUARANTINE PLANT PESTS, BULBS, TREATMENT AND COUNTRY OF ORIGIN

##### I. INSECTS

NO.	TYPE OF OPTK	TYPE BULBS LAYER	TREATMENT	COUNTRY OF ORIGIN
1.	<b>Eumerus tuberculatus</b> Rond.; Diptera: Syrphidae; <b>lesser bulb fly</b>	Allium cepa (onion); Allium ascalonicum (shallot); Crinum asiaticum (Lily); Allium sativum (garlic)	1. Fumigation (CH <sub>3</sub> Br Pure):  a. 40gr/M <sup>3</sup> /26oC-31oC/2 hour;or b. 32gr/M <sup>3</sup> /32oC-35oC/2 hour ;or c. 16gr/M <sup>3</sup> /26oC-31oC/2 hour ;or  2. Irradiation : 70 gray	<b>American</b> : USA
2.	<b>Frankliniella occidentalis</b> (Pergande);	Allium ascalonicum (shallot)	1. Fumigation (CH <sub>3</sub> Br Pure):40gr/M <sup>3</sup> /26oC	<b>Africa</b> : Kenya, Nigeria, South

	<p>(=Euthrips helianthi          =Euthrips          occidentalis =E. tritici var.          californicus =Frankliniella          californica =F. canadensis          =F. chrysanthemi          =F. claripennis          =F. conspicua =F. dahliae          =F. dianthi          =F. nubila =F. occidentalis f.          brunnescens          =F. occidentalis f.          dubia =F. syringae =F. tritici          maculata =F. tritici var.          moultoni          =F. umbrosa =F. venusta          =F. helianthi =F. moultoni          =F. trehernei);          Thysanoptera,          Thripidae; <b>western flower          thrips alfalfa thrips,          flower thrips,          western (USA) grass          thrips</b></p>		<p>-31oC/2 hour ;or          2. Irradiation: 70 gray</p>	<p>Africa, Swaziland,          Zimbabwe  <b>Asia</b> :India, Israel,          Japan, Korea,          Kuwait, Malaysia, Sri          Lanka, Turkey  <b>America</b> : Argentina,          Brazil,          Canada, Chili, Columbia,          Costa Rica,          Dominica, Equador,          Guatemala,          Guyana, Martinique,          Mexico, Peru,          Puerto Rico, USA  <b>Europe</b> : Albania,          Austria, Belgium,          Bulgaria, Croatia,          Cyprus, Czech,          Denmark, Estonia,          Finland, France,          Germany, Greece,          Hungary, Ireland,          Italy, Lithuania,          Macedonia, Malta,          Netherland, Norway,          Poland,          Portugal, Roman,          Federasi Rusia, Slovak,          Slovenia, Spain, Swedia,          Swiss, England  <b>Oceania</b> : Australia, New          Zealand</p>
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3.	<p><b>Graphognathus leucoloma</b> Boh.; (=Naupactus leucoloma = Pantomorus leucoloma); Coleoptera: Curculionidae; <b>white fringed weevil, whitefringed beetle</b></p>	Allium ascalonicum (shallot)	<p>1. Fumigation (CH<sub>3</sub>Br Pure):40gr/M<sup>3</sup>/26oC-31oC/2 hour ;or</p> <p>2. Irradiation: 70 gray</p>	<p><b>Africa</b> : South Africa <b>America</b> : Argentina, Brazil, Chili, Peru, USA, Uruguay <b>Oceania</b> : Australia, New Zealand</p>
4.	<p><b>Delia antiqua</b> (Meign.); (=Anthomyia antique =A.ceparum =Chortophila antiqua Delia cepetorum =Hylemya antiqua =H.ceparum =Leptohylemyia antique =Pegomyia ceparum =P.cepetorum =Phorbia ceparum P.cepetorum = P.antiqua); Diptera: Anthomyiidae; <b>onion maggot, onion fly</b></p>	Allium ascalonicum (Shallot), Allium porrum (leek), Allium sativum (garlic), Allium spp	<p>1.Fumigation (CH<sub>3</sub>Br Pure) :</p> <p>a. 40 gr/M<sup>3</sup>/26oC-31oC/2 hour ;or</p> <p>b. 32 gr/M<sup>3</sup>/32oC-35oC/2 hour ;or</p> <p>c. 16 gr/M<sup>3</sup>/26oC-31oC/2 hour ;or</p> <p>2. Irradiation: 70 gray</p>	<p><b>Africa</b> : Egypt <b>America</b> : Antigua-Barbados, Brazil, Canada, Columbia, Mexico, USA Asia : Armenia, China, Georgia, India, Iran, Iraq, Israel, Japan, Kazakhstan, Korea, Mongolia, Philippines, Turkey <b>Europe</b> : Austria, Belgium, Bulgaria, Cyprus, Czech, Slovak, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Malta, Moldova, Netherland, Norway, Poland, Portugal, Roman, Federasi Rusia,</p>



				Slovak, Spain, Swedia, Swiss, England, Yugoslavia
5.	<p><b>Peridroma saucia</b> (Hubner);  (=Agrotis angulifera  =A.impacta  =A.inermis =A.intecta  =A.ortonii  =A.saucia =Lycophotia margaritosa  =L.ochronota =L.saucia  =Noctua aequa =N.majuscula  =N.margaritosa =N.saucia  =Rhyacia margaritosa  =R.saucia  =Peridroma margaritosa);  Lepidoptera: Noctuidae  <b>variegated cutworm, pirly underwing moth</b></p>	Allium ascalonicum (shallot)	<p>1. Fumigation (CH<sub>3</sub>Br Pure):40gr/M<sup>3</sup>/26oC -31oC/2 hour ;or  2. Irradiation: 70 gray</p>	<p><b>Africa</b> : Marocco, Tunisia  <b>America</b> : Argentina, Bermuda, Brazil, Chili, Columbia, Costa Rica, Guatemala, Jamaica, Mexico, Peru, Puerto Rico, USA, Uruguay, Venezuela  <b>Asia</b> : Armenia, China, Israel, Japan, Sri Lanka, Syria, Turkey  ' : Albania, Austria, Belgium, Bulgaria, Czech, Denmark, Faroes Island, Finland, Yugoslavia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherland, Norway, Poland, Portugal, Roman, Federasi Rusia, Slovak, Spain,</p>

				Canary Island, Swedia, Swiss, England
6.	<b>Zonocerus elegans</b> (Thunb.); (=Acrydium sanguinolentum =Gryllus elegans =Poekilocerus roseipennis); Orthoptera: Acrididae; <b>elegant grasshopper</b>	Allium ascalonicum (shallot)	1. Fumigation (CH <sub>3</sub> Br Pure):40gr/M <sup>3</sup> /26oC -31oC/2 hour ;or 2. Irradiation: 70 gray	<b>Africa</b> : Angola, Botswana, RD Kongo, Kongo, Lesotho, Madagaskar, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe
7.	<b>Zonocerus variegatus</b> (L.); (=Acrydium sanguinolentum =Gryllus (Locusta) variegatus =G.laevis =G.opacus); Orthoptera: Acrididae; <b>variegated grass hopper</b>	Allium ascalonicum (shallot)	1. Fumigation (CH <sub>3</sub> Br Pure):40gr/M <sup>3</sup> /26oC -31oC/2 hour ;or 2. Irradiation: 70 gray	<b>Africa</b> : Angola, Benin, Burkina Faso, Kamerun, Afrika Tengah, Chad, RD Kongo, Kongo, Ivory Coast, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Liberia, Malawi, Mali, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Togo

## II. NEMATODES

NO.	TYPE OF OPTK	TYPE BULBS LAYER	TREATMENT	COUNTRY OF ORIGIN
1.	<b>Aphelenchoides fragariae</b> (Ritzema Bos) (Christie); (=Aphelenchoides olesistus =A.olesistus var. longicollis =A.pseudolesistus =Aphelenchus fragariae =A.olesistus =A.olesistus var. longicollis =A.pseudolesistus); Aphelenchoididae; <b>bud and leaf nematode</b>	Allium ascalonicum (shallot), Allium sativum (garlic)	1.Fumigation (CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or b. 32 gr/M <sup>3</sup> /32oC-35oC/2 hour ;or c. 16 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or  2. Irradiation: 70 gray	<b>America:</b> Canada, Mexico, USA <b>Europe:</b> Belgium, England, Denmark, Germany, Hungary, Ireland, Italy, Latvia, Moldova, Portugal, Poland, Federasi Rusia, Spain, Swis, Swedia, Ukraina <b>Asia:</b> China, India, Israel, Korea Selatan, Kirgyztan, Japan, Turkey <b>Oceania:</b> Australia, New Zealand, Papua New Guinea, Hawaii
2.	<b>Belonolaimus longicaudatus</b> Rau; Belonolaimidae; <b>sting nematode</b>	Allium cepa (onion)	1.Fumigation (CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or b. 32 gr/M <sup>3</sup> /32oC-35oC/2 hour ;or c. 16 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or  2. Irradiation: 70 gray	<b>America:</b> Bahama, Bermuda, Costa Rica, Mexico, Puerto rico, USA.
3.	<b>Ditylenchus destructor</b> Thorne; Anguinidae; <b>potato rot</b>	Allium ascalonicum (shallot), Allium sativum (garlic)	1.Fumigation (CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-	<b>Europe:</b> Albania, Austria, Belarusia, Belgium, Netherland,

	<b>nematode, potato tuber nematode, potato eelworm</b>		<p>31oC/2 hour ;or  b. 32 gr/M3/32oC-35oC/2 hour ;or  c. 16 gr/M3/26oC-31oC/2 hour ;or</p> <p>2. Irradiation: 70 gray</p>	<p>Bulgaria, Czech, Estonia, Finland, France, Germany, Greece, Hungary, England, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Norway, Poland, Roman, Federasi Rusia, Slovak, Spain, Swedia, Swis, Ukraina</p> <p><b>Asia:</b> Azerbaijan, China, India, Iran, Japan, Kazakhstan, Korea Selatan, Kirgistan, Malaysia, Pakistan, Saudi Arabia, Tajikistan, Turkey, Uzbekistan</p> <p><b>Africa:</b> South Africa</p> <p><b>America:</b> Canada, Equador, Haiti, Mexico, Peru, USA</p> <p><b>Oceania:</b> Australia, New Zealand</p>
4.	<b>Longidorus elongatus</b> (de Man) Thorne & Swanger; (=Dorylaimus elongatus =Dorylaimus tenuis)	Allium spp.,	<p>1.Fumigation (CH<sub>3</sub>Br Pure) :</p> <p>a. 40 gr/M3/26oC-31oC/2 hour ;or  b. 32 gr/M3/32oC-</p>	<p><b>Europe:</b> Belgium, Bulgaria, Czech, Denmark, Estonia, England,</p>

	<p>=Longidorus menthasolanus        =Longidorus monohystera        =Trichodorus elongatus);        Longidoridae; <b>needle nematode, tomato black ring eelworm</b></p>		<p>35oC/2 hour ;or        c. 16 gr/M3/26oC-31oC/2 hour ;or</p> <p>2. Irradiation: 70 gray</p>	<p>Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Moldova, Netherland, Norway, Poland, Portugal, Roman, Federasi Rusia, Slovak, Spain, Swedia, Swis, Ukrania,  <b>Asia:</b> Georgia, India, Kazakhtan, Pakistan, Tajikistan, Uzbekistan, Vietnam  <b>Africa:</b> South Africa  <b>America:</b> Canada, USA  <b>Oceania:</b> New Zealand.</p>
5.	<p><b>Meloidogyne exigua</b>        Goeldi;        (=Heterodera exigua);        Meloidogynidae; <b>coffee rootknot nematode, Brazilian pyroid coffee nematode, root-knot nematode</b></p>	Allium ascalonicum (shallot)	<p>1. Fumigation (CH3Br Pure):40gr/M3/26oC -31oC/2 hour ;or</p> <p>2. Irradiation: 70 gray</p>	<p><b>America:</b> Bolivia, Brazil, Chili, Columbia, El Salvador, Dominica, Guatemala, Guadeloupe, Guyana, Honduras, Martinique, Nicaragua, Puerto Rico, Peru, Suriname, Trinidad, Venezuela.</p>
6.	<p><b>Pratylenchus thornei</b>        Sher. &amp; Allen;        Pratylenchidae; <b>Thorne's root lesion</b></p>	Allium ascalonicum (shallot)	<p>1. Fumigation (CH3Br Pure):40gr/M3/26oC -31oC/2 hour ;or</p>	<p><b>Europe:</b> Belgium, Bulgaria, Croatia, Cyprus, Denmark, Yugoslavia,</p>

	<b>nematode</b>		2. Irradiation: 70 gray	Germany, Greece, Italy, Netherland, Portugal, Federasi Rusia, Spain, England <b>Asia:</b> Afganistan, India, Iran, Israel, Japan, Jordan, Saudi Arabia, Siria, Turkey <b>Africa:</b> Egypt, Libia, Malawi, Marocco <b>America:</b> Argentina, Mexico, USA <b>Oceania:</b> Australia.
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### III. FUNGAL

NO.	TYPE OF OPTK	TYPE BULBS LAYER	TREATMENT	COUNTRY OF ORIGIN
1.	<b>Cercospora duddiae</b> Welles; Anamorphic fungi; <b>leaf spot of onion and garlic, withertip of onion and garlic, leaf spot: garlic, leaf spot: onion</b>	Allium ascalonicum (shallot), Allium shoenoprasum (leeks, chives)	1.Fumigation(CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or b. 32 gr/M <sup>3</sup> /32oC-35oC/2 hour ;or 2. Irradiation: 70 gray	<b>Asia:</b> India <b>America:</b> Barbados, Jamaica

### IV. MITES

NO.	TYPE OF OPTK	TYPE BULBS LAYER	TREATMENT	COUNTRY OF ORIGIN
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1.	<b>Petrobia lateens</b> (Tetranychidae) <b>Brown Wheat Mite</b>	Allium sativum (garlic), Allium cepa (onion)	1.Fumigation(CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or b. 32 gr/M <sup>3</sup> /32oC-35oC/2 hour ;or  2. Irradiation: 70 gray	<b>Europe:</b> Austria, Denmark, France, Germany, Italy, Netherland, Portugal, Poland, Federasi Rusia, Spain <b>Asia:</b> China, India, Republic of Korea <b>Africa:</b> Egypt <b>America:</b> Canada, USA <b>Oceania:</b> Australia
2.	<b>Rhizoglyphus echinopus</b> <b>Bulb Mite</b>	Alliums pp.	1.Fumigation (CH <sub>3</sub> Br Pure) : a. 40 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or b. 32 gr/M <sup>3</sup> /32oC-35oC/2 hour ;or c. 16 gr/M <sup>3</sup> /26oC-31oC/2 hour ;or  2. Irradiation: 70 gray	<b>Europe:</b> Former USSR, Hungary, Spain, <b>Asia:</b> Taiwan, Japan, Korea. <b>America:</b> USA (Texas) <b>Oceania:</b> New Zealand

**MINISTER OF AGRICULTURE,**

**SUSWONO**