LIST OF BAN-LIFTED PLANT ITEMS AND KEY CONDITIONS (MEET THE STANDARDS SET BY THE MINISTER OF AGRICULTURE, FORESTRY AND FISHERIES) Edited by Japan Fresh Produce Import and Safety Association (P.I.S.A). March, 2015

COUNT	RIES / DISTRICTS	FRES	H FRUITS	BAN-LIFTED YEAR	TARGET PESTS				TREATMENT OR OTH	HER MEASURES
UNITED STATES	HAWAIIAN ISLANDS	PAPAYA	CULTIVARS SOLO	April, 1969	①MEDITERRANEAN FRUIT FLY	Vapor Heat Treatment:				
OF AMERICA		MANGO	KEITT HADEN	May, 2000	©ORIENTAL FRUIT FLY COMPLEX ③MELON FLY		nfested by using saturate	ed vapor at vapor heat tro	eatment facilities till the	temperature of the innermost fruit pulp reaches
	EXCLUDING	CHERRY	1.BING	①January, 1978	CODLING MOTH	Methyl Bromide Fumigati	on			
	HAWAIIAN IS.		2.LAMBERT	②December, 1986		① Of cultivars 1~10				
			3.VAN	1000	-	Dosage	Temperature		Ratio of fruit capacity	
			4.RAINIER 5.GARNET	May, 1992 January, 1995	-	32g/m ³ 40g/m ³	22° C or above $17 \sim 22^{\circ}$ C or below	2 hours 2 hours	50% or less 50% or less	
			6.TULARE	October, 1996	-	40g/m 48g/m ³	$12 \sim 17^{\circ}$ C or below	2 hours 2 hours	50% or less	
			7.BROOKS			64g/m	$6\sim 12^{\circ}$ C or below	2 hours	50% or less	
			8.LAPIN	July, 1999		② Or all the cultivars incl	uding cultivars 1~10, an	d 11		
			9.SWEET HEART	M. 0001	-	Dosage	Temperature	Duration of exposure		he concentration of methyl bromide at the
			10.CHELAN 11.EXCEPT ABOVES	May, 2001 October, 2001	-	64g/m ³	6∼12°C or below	2 hours or more	rumigatio	n facilities by duration exposure 61.9 or up
			TI.EAOEI I ADOVES	October, 2001		04g/11	0 12 C of below	2 hours of more		01.0 01 up
			ALL VARIETY	Jun,2009		the result of the survey 2. Survey in designated pr 1 rapping survey (rap bootnome) 2 Fresh fruit survey 3. Inspection and Certifica The phytosanitary cert (a) The fruit is not infeste	ys set forth in Article 2. oduction areas as sman be set at the dens attion in Producing Area tificate shall include the d with Codling moths. duced at the designated a	suy or one per 7		rities to be subject to intensive trapping survey rvey do not exceed 10 per trap per week on aver
	EXCLUDING HAWAIIAN IS.	WALNUT IN SHELL	1.HARTLEY 2.PAYNE 3.FRANQUETTE	April, 1986	-	Methyl bromide fumigatio Dosage 56g/m ³	n: Temperature 15.6°C or above	Duration of exposure 4 hours	Ratio of stone capacity 55% or less	
	EXCLUDING HAWAIIAN IS.	NECTARINE	1.SUMMER GRAND 2.SPRING RED 3.FIR EBRITE 4.FANTASIA 5.MAY GRAND	June, 1988	-	Methyl bromide fumigatio Dosage 48g/m ³	n: Temperature 21°C or above	Duration of exposure 2 hours	Ratio of fruit capacity 50% or less	
			6.RED DIAMOND 7.MAY FINE 8.MAY GLO 9.MAY DIAMOND 10.ROYAL GIANT 11.EXCEPT ABOVES	May, 1993 May, 1995 August, 2000	-					
1	EXCLUDING	EUROPEAN PLUM	1.D'AGEN	()April, 2001		Methyl bromide fumigatio	n:			
	HAWAIIAN IS.		2.TULARE GIANT	②August, 2005		 Of cultivars 1~3 				
			3.MOYER			Dosage	Temperature		Ratio of fruit capacity	
			4.EXCEPT ABOVES			(n) 0 m of all the sultiness in	20°C or above acluding cultivars 1~3 an	2 hours	50% or less	
						Dosage	Temperature	Duration of exposure	The production of the co	incentration of methyl bronnue at the fullingation
						48g/m ³	20°C or above	2 hours or more		72.1 or up
	-									
	 WASHINGTON, OREGONAND CALIFORNIA EXCLUDING 	NAPPLE	1.RED DELICIOUS 2.GOLDEN DELICIOUS 3.FUJI 4.BRAEBURN 5.GRANNY SMITH	August, 1994 5 July, 1999	①CODLING MOTH ②FIRE BLIGHT	After the following A treat A Cold Treatment: After the fruit pulp ter B Methyl Bromide Fumiga ① Of cultivars 1~7	nperature reaches $2.2~\%$		ested by the same temper	rature (2.2°C) for 55 consecutive days at cold tre
	HAWAIIAN IS.	1	6.GALA			Dosage	Temperature		Ratio of fruit capacity	
			7.JONA GOLD	0.11.0001	4	56g/m ³	10°C or above	2 hours	50.9% or less	
			8.EXCEPT ABOVES	October, 2001		② Or of all the cultivars in Dosage	ncluding cultivars 1~7 an Temperature	nd 8 Duration of exposure	The production of the co	oncentration of methyl bromide at the lumigatio
						56g/m ³	10°C or above	2 hours or more		85.5 or up
								04 11010		
	EXCLUDING HAWAIIAN IS.	ТОМАТО		April, 1997 September, 1999	TABACCO BLUE MOLD					
ARGENTINE REPU	JBLIC	GRAPE FRUIT LEMON SWEET ORANGE	1.VALENCIA	April, 2003	MEDITERRANEAN FRUIT FLY	(Grape fruit) After the fruit pulp ter disinfested by the temp (Lemon)	nperature reaches 1.9°C, perature below 3.2°C for t	the fruits shall be disinfe 23 days.	ested by the temperature	ipping containers as follows: below 2.3°C for 19days. Or after the fruit pulp
			2.SALUSTIANA 3.LANELATE	February, 2014			nperature reaches 1.9 °C, perature below 3.2°C for VALENCIA	24 days.		below 2.2°C for 19days. Or after the fruit pulp t
		ELLENDALE	4.WASHINGTON NAVE			(b)weet brange)			perature reaches 1.5 C, t	the fruits shall be disinfested by the temperatur
		ELLENDALE CLEMENTINE	4.WASHINGTON NAVE			(oweet orange)	Salustiana, Lanelate	, Washington Navel		the fruits shall be disinfected by the temperatur
			4. WASHINGTON NAVE			(sweet of ange)		, Washington Navel After the fruit pulp tem Nova, Murcott	perature reaches 2.1 °C, t	

	MEANS OF CONVEYANCE
aches 47.2°C.	SHIP CARGO AIR CARGO
	AIR HAND BAGGAGE
	SHIP CARGO AIR CARGO
]	
rveys and fresh fruit surveys for Codling moths as	
avarage in California and 20 new two new week an	
average in California and 30 per trap per week on	
	SHIP CARGO
gation facilities by duration	
	SHIP CARGO
	AIR CARGO
d treatment facilities.	
gation facilities by duration	
	SHIP CARGO
	AIR CARGO
ulp temperature reaches 3.0°C, the fruits shall be	
with temperature receives 2 \hat{W} the finite shall be	
ulp temperature reaches 3.0°C, the fruits shall be	
ature below 2.2°C for 21days.	
ature below 2.1 $^\circ \mathrm{C}$ for 21 days.	
ature below 2.1 $^\circ \!\!\! C$ for 23 days.	

COUNTRIES / DISTRICTS	FRES ITEMS	H FRUITS CULTIVARS	BAN-LIFTED YEAR	TARGET PESTS	TREATMENT OR OTHER MEASURES
STATE OF ISRAEL	SWEET ORANGE	1.SHAMOUTI 2.VALENCIA	June, 1972	MEDITERRANEAN FRUIT FLY	Cold Treatment: The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers as follows:
STATE OF ISRAEL	GRAPE FRUIT				(Orange) After the fruit pulp temperature reaches 0.5°C, the fruits shall be disinfested by the temperature for 14 days. Or after the fruit pulp temperatu
	SWEETIE		March, 1990		the temperature for 16 days. (Grape fruit) After the fruit pulp temperature reaches 0.5°C, the fruits shall be disinfested by the temperature for 13 days. Or after the fruit pulp temperatu
	POMELO		December, 1998		the temperature for 16 days. (Sweety) After the fruit pulp temperature reaches 1.5°C, the fruits shall be disinfested by the temperature for 16 days.
	LEMON		May, 2008		(Pomelo) After the fruit pulp temperature reaches 1.0°C, the fruits shall be disinfested at 1.5°C or below for 15 days.
	LEMON		May, 2000	-	(Lemon)
	OR		July, 2011		After the fruit pulp temperature reaches 1.5°C, the fruits shall be disinfested at 1.5°C or below for 16 days. (OR) After the fruit pulp temperature reaches 2.2°C, the fruits shall be disinfested at 2.2°C or below for 18 days.
	PERSIMMON	TRIUMPH	November, 2003	-	Cold Treatment:
					The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temp or below for 12 consecutive days. Or after it reaches 1.1 °C, it has been kept at 1.1 °C or below for 14 consecutive days.
REPUBLIC OF ITALY	SWEET ORANGE	TAROCCO SANGUINELLO	March, 2005	MEDITERRANEAN FRUIT FLY	The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp tempera below for 14 consecutive days.
		MORO	February, 2014		below for 14 consecutive days.
INDIA	MANGO	1.ALPHONSO 2.KESAR	June, 2006	①ORIENTAL FRUIT FLY COMPLEX ②MELON FLY	In vapor neat
		3.CHAUSA 4.BANGAN PALLI 5.MALLIKA 6.LANGRA			
AUSTRALIA EXCLUDING TASMANIA	GENUS CITRUS		January, 2005	[⊕] MEDITERRANEAN FRUIT FLY [©] QUEENSLAND FRUIT FLY	 Plants and areas Fresh citrus fruits produced in areas of Australia designated by the plant protection authorities of Australia to be subject to intensive trapping Mediterranean fruit flies and Queensland fruit flies set forth in Article 2. Surveys in production areas Trapping survey Fresh fruit survey Inspection and certification in production areas (a part of extract) The phytosanitary certificate shall include the following statements:
					(a) The fruit is not infested with the Mediterranean fruit fly or Queensland fruit fly.(b) The plants have been produced in designated areas where no Mediterranean fruit flies and Queensland fruit flies have been detected in the sur
	SWEET ORANGE	1.VALENCIA 2.WASHINGTON NAVEI	June, 1982 October, 2001	-	Cold Treatment: At cold treatment facilities and refrigerated shipping containers, the fruits shall be cooled until the fruit pulp temperature has reached 1.0°C and
	IMPERIAL	2.0000000000000000000000000000000000000	April, 1999	-	18 consecutive days, and 3.1°C for 20 consecutive days.
	ELLENDALE MURCOTT		October, 2001 June, 2010		Cold Treatment for Grapefruit:
	MINNEOLA GAPEFRUIT		-		The fruits shall be cooled until the fruit pulp temperature has reached 2.0°C and maintains it for 18 consecutive days , and 3.0°C for 20 consecu
	LEMON		May, 1992 October, 2001		Cold Treatment: Lemon The fruits shall be disinfested at cold treatment facilities and refrigerated shipping containers at the fruit pulp temperature will maintain 1.
	GRAPE	CRIMSON SEEDLESS THOMPSON SEEDLESS RED GLOBE	February, 2014	-	consecutive days, or 3.1°C for 18 consecutive days. Grape This fruits shall be disinfected at cold treatment facilities and refrigerated shipping containers at the fruit pulp temperature will maintain 1. consecutive days, or 3.0°C for 20 consecutive days.
	MANGO	1.KENSINGTON 2.R2E2 3.KEITT	October, 1994 December, 1999	-	Vapor Heat Treatment: The fruits shall be disinfested at vapor heat treatment facilities by saturated vapor at the fruit pulp temperature of 47.0°C or more for 15minut Note) Nicknames in Australia: R2E2 is called Masc and KEITT is called Machilba.
		4.KENT			
TASMANIA	APPLE	5.PALMAR FUJI	December, 1998	CODLING MOTH	Methyl Bromide fumigation: ① Fuji, Jonagold
		FUJI,JONA GOLD AND OTHER CUTIVARS	July, 2006	-	Dosage Temperature Duration of exposure Ratio of fruit capacity 48g/m³ 17°C or above 2 hours 53% or less ② @All the cultivars including ①
					Dosage Temperature Duration of exposure The production of the concentration of methyl bromide at the fumigat 48g/m ² 17°C or above 2 hours or more 76.4 or up
	CHERRY	LAPIN AND OTHER	March, 2005	-	Methyl bromide fumigation:
		CULTIVARS			Lapin Dosage Temperature Room temperature Duration of exposure Ratio of fruit capacity
					50g/m³ 12°C or above 17°C or above 2 hours 44.5% or less ② Lapin and other cultivars
					Dosage Temperature Room temperature Duration of exposure The production of the concentration of methy 50g/m³ 12°C or above 17°C or above 2 hours or more 77.
		ALL VARIETY	December, 2008	-	1. Plants and areas: The cherry fresh fruits shall be produced in designated areas by Australian plant protection authorities to be subject to intensive trapping survice the result of the surveys set forth in Article 2. 2. Survey in designated production areas
					 2. Durity in designated production areas (1) Trapping survey (2) Fresh fruit survey (3) Inspection and Certification in Producing Area (a part of excerpts) The phytosanitary certificate shall include the following statements: (a) The fruit shall not be infested with Codling moths. (b) In e fruit shall not be infested with Codling moths.

	MEANS OF CONVEYANCE
	SHIP CARGO
	AIR CARGO
ture reaches 1.5° C, the fruits shall be disinfested by	
ture reaches 1.5°C, the fruits shall be disinfested by	
mperature reaches 0.0°C, it has been kept at 0.0° C	
erature reaches $1.2^\circ\!\!\mathrm{C}$, and has been kept at $1.2^\circ\!\!\mathrm{C}$ or	SHIP CARGO
Autor reaches 1.20, and has been kept at 1.20 of	AIR CARGO
	SHIP CARGO AIR CARGO
	SHIP CARGO
ng surveys and fresh fruit surveys for the	AIR CARGO
surveys as the result of surveys set forth in Article 2.	
and maintains it for 16 consecutive days, 2.1 $^\circ\!\mathrm{C}$ for	
cutive days.	
$1.0^\circ\!\mathrm{C}$ for 14 consecutive days, $2.1^\circ\!\mathrm{C}$ for 16	
1.0°C for 10 correct (1 - 1 0.0°C f - 10	
1.0°C for 16 consecutive days, 2.0°C for 18	
	SHIP CARGO
utes.	AIR CARGO AIR HAND BAGGAGE
	SHIP CARGO AIR CARGO
ation facilities by duration	
,	
hyl bromide at the fumigation facilities by duration 7.9 or up	
urveys and fresh fruit surveys for Codling moths as	
g area wnere the number of Codling moths in the lesignated area where no Codling moths have been	

COUNTRIES / DISTRICTS	FRES ITEMS	SH FRUITS CULTIVARS	BAN-LIFTED YEAR	TARGET PESTS	TREATMENT OR OTHER MEASURES
KINGDOM OF THE NETHERLANDS	TOMATO AND BELL		February, 1993	MEDITERRANEAN FRUIT FLY	1. Plants and areas
					Fruits shall be produced in sites (Designated Production Sites) designated by the Plant Quarantine Authority of The Netherlands as areas where no Mediterranean frustisfy the following conditions:
	COD A MIDED DV		F1 1000		① The fruits shall be produced at the facilities (Designated Production Facilities) designated by the Plant Quarantine Authority of The Netherlands.
	STRAWBERRY, CUCUMBER.		February, 1998		② The fruits shall be produced at the areas (Quarantine Monitoring Areas) designated by the Plant Quarantine Authority of The Netherlands as areas which should be w Mediterranean fruit fly as the result of occurrence survey mentioned in Article 2 during the time when Mediterranean fruit flies have been confirmed to be no fear of s
	EGGPLANT,				2. The Occurrence Survey in quarantine monitoring areas, designated production size and designated production facilities.
	GRAPE,				D Pheromene trap monitoring
	AUTUMN PUMPKIN	AND MELON			 2 Orchard fruit monitoring 3. Inspection and Certification in Producing Area (a part of excerpts)
					The phytosanitary certificate shall be mentioned the following additional remarks as the result of the occurrence survey mentioned in Article 2:
					The fruit shall be produced at the designated production facilities where no Mediterranean fruit flies have not been trapped in the designated producing areas where n flies have not been trapped.
CANADA	CHERRY	LAMBERT	June, 1982	CODLING MOTH	Methyl Bromide Fumigation
			,		Dosage Temperature Duration of exposure Ratio of fruit capacity
					$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	TOMATOE		September, 1996	TABACCO BLUE MOLD	
			September, 1999		
REPUBLIC OF COLOMBIA	YELLOW PITAYA	(Reference:) CACTUS FRUIT	April, 1999	MEDITERRANEAN FRUIT FLY	Vapor Heat Treatment: The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.0°C or above for 20 minutes.
		(Reference:)Scientific nan			
	MANGO	Selenicereus magalanthu TOMMY ATKINS	s October,2009	1	
SPAIN	()LEMON		December, 1988	MEDITERRANEAN FRUIT FLY	Cold Treatment:
	©CLEMENTINE	1 NIA 37731	January, 2004		The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers in the following means:
	3SWEET ORANGE	2.VALENCIA	September, 1996		① Lemon and Clementine After the fruit pulp temperature reaches 2.0°C, the fruits shall be disinfested at the fruit pulp temperature of 2.0°C or below for 16 consecutive days.
		3.SALUSTIANA	January, 2004		2 Sweet Orange
					After the fruit pulp temperature reaches 1.5°C, the fruit shall be disinfested at the fruit pulp temperature of 2.0°Cor below for 17 consecutive days.
KINGDOM OF SWAZILAND	SWEET ORANGE	1.WASHINGTON NAVEL	June, 1973	MEDITERRANEAN FRUIT FLY	Cold Treatment:
1		2.VALENCIA 3.TOMANGO			The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temperature reaches minus temperature for 12 consecutive days.
		4.PROTEA	-		
	GRAPE FRUIT CLEMENTINE		June, 2007	_	Cold Treatment:
			,		The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temperature reaches 0.6 °C a temperature for 14 consecutive days.
UNCDOM OF THAT AND	OMANGO	1 NANI IZI ADMO MUMI	M	ODIENTAL EDIUT ELV. COMDI EV	
KINGDOM OF THAILAND	(I)MANGO	1.NAN-KLARNG-WUN	March, 1987	①ORIENTAL FRUIT FLY COMPLEX ②MELON FLY	① Mango
		2.NAM-DORKMAI	February, 1993		·Nan-Klarng-wun
		3.PIMSEN-DAENG 4.RAD			The fruits shall be disinfested by vapor heat treatment facilities, through the use of saturated vapor for 10 minutes at the temperature of 46.5°Cor higher at the innerm the use of saturated vapor for 20 minutes at the temperature of 47.0°C at the innermost fruit pulp after a steady increase in innermost temperature to 43.0°C without u
		5.MAHACHANOK	November, 2006		•Nan Dorkmai Pimsen Daeng,Rad,and Mahachanok
					The fruits shall be disinfested by vapor heat treatment facilities, through the use of saturated vapor for 20 minutes at the temperature of 47.0°C at the innermost temp using vapor.
	②MANGOSTEEN		April, 2003	ORIENTAL FRUIT FLY COMPLEX	2 Mangosteen
	③PUMMELO	THONGDEE	February, 2012	4	The fruits shall be disinfested by vapor heat treatment facilities through the use of saturated vapor for 58 minutes at a temperature of 46 °C or higher at the innermos
	ST CHIMINDO		- 551 miry, 2012		In vapor heat facility, confirm that core temperature of fresh fruit was raised with vapor of RH 50% to 80% up to 43°C at a constant ratio and, then, after reaching 46°C
					kept at the same or above temperature for 30minutes.
TAIWAN	SWEET ORANGE	1.TANKAN 2.LIUCHENG	December, 1975 April, 1980	ORIENTAL FRUIT FLY COMPLEX	(EDB: A means of an alternative treatment is being developed.)
	MANGO	KEITT	June, 1976	ORIENTAL FRUIT FLY COMPLEX	1
	PAPAYA	SOLO TAINO No2	March, 1991 December, 2004	©MELON FLY	Vapor Heat Treatment:
					The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 43.0°C after a steady increase of pulp temper
1	MANGO	1.IRWIN	June, 1976	-	Vapor Heat Treatment:
			March, 1989		The fruits shall be disinfested by vapor heat treatment facilities through the use of saturated vapor for 30 minutes at a temperature of 46.5 Cor higher at the innermos
	SWEET ORANGE	2.HARDEN PONKAN	March, 1991 November, 1969	ORIENTAL FRUIT FLY COMPLEX	that, the temperature shall become a normal temperature rapidly. Cold Treatment:
			March, 1988	4	At cold treatment facilities, after fresh fruit pulp temperature reaches 1°C and keeps the same temperature for 14 consecutive days.
	POMELO		December, 1999		Cold Treatment: At cold treatment facilities, after fresh fruit pulp temperature reaches 1.0°C and keeps the same temperature for 12 consecutive days.
	LITCHI		April, 1980	-	After the following A treatment is done, the B treatment will be started.
			March, 1980		A Vapor Heat Treatment:
					At vapor heat treatment facilities, to be confirmed that the fruit pulp temperature has increased steadily from 30.0°C to 41.0°C within 45 minutes and maintain the fruit for 20 minutes.
					for 20 minutes. B Cold Treatment:
					At cold treatment facilities, the fruit pulp temperature is lowered to 2°C, and is being kept for 42 hours. In this case, after the vapor heat treatment of the above A, the lowered to 2°C within 6 hours.
	GRAPE	1.КҮОНО	December, 1997	1	Cold Treatment:
		2.ITALY	1	1	At cold treatment facilities, after the fruit pulp temperature reaches 0.5°C keep the same treatment at and under 1.0°C for 12 consecutive days.
	HYLOCEREUS UNDATUS	(Reference) DRAGON FRUIT	April, 2010	-	Vapor Heat Treatment The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.5°C or above for 30 minutes.

	MEANS OF CONVEYANCE
herlands as areas where no Mediterranean fruit fly has occurred and	SHIP CARGO AIR CARGO
ority of The Netherlands. f The Netherlands as areas which should be watched the entry of uit flies have been confirmed to be no fear of spreading.	
mentioned in Article 2: ed in the designated producing areas where no Mediterranean fruit	
	SHIP CARGO AIR CARGO
f 46.0°C or above for 20 minutes.	SHIP CARGO AIR CARGO
the following means:	SHIP CARGO AIR CARGO
ow for 16 consecutive days.	
v for 17 consecutive days.	
ter the fruit pulp temperature reaches minus $0.6{\rm \widetilde{C}}$ and keeps the same	SHIP CARGO AIR CARGO
ter the fruit pulp temperature reaches $0.6^\circ\!\mathrm{C}$ and keeps the same	
e temperature of 46.5°Cor higher at the innermost fruit pulp, or through in innermost temperature to 43.0°C without using vapor . e temperature of 47.0°C at the innermost temperature of 43.0°C without emperature of 46°C or higher at the innermost fruit pulp.	SHIP CARGO AIR CARGO AIR HAND BAGGAGE
a constant ratio and, then, after reaching $46^\circ\!\mathrm{C}$ with saturated vapor,	
	SHIP CARGO AIR CARGO AIR HAND BAGGAGE
f 43.0°C after a steady increase of pulp temperature up to 47.2°C.	
emperature of 46.5°Cor higher at the innermost fruit pulp. And after	
utive days.	
ecutive days.	
11.0°C within 45 minutes and maintain the fruit temperature of 46.2°C	
r the vapor heat treatment of the above A, the fruit pulp temperature is	
or 12 consecutive days.	
f 46.5°C or above for 30 minutes.	

COUNTR	IES / DISTRICTS	ITEMS	ESH FRUITS CULTIVARS	BAN-LIFTED YEAR	TARGET PESTS	TREATMENT OR OTHER MEASURES
PEOPLE'S REPUBLIC OF CHINA	新彊ウイグル自治区 Xinjiang Yughur Autonomous Region	MELON	(Reference:) HAMI MELON 哈密瓜 =HAMI URI	March, 1988	MELON FLY	 Plants and areas The fruit shall be produced in those areas in Xin-jiang Uygur Autonomous Region of the People's Republic of China Authorities of the People's and fruit survey set forth in Article 2 below are conducted by Chinese Authorities. Surveys in the production areas Trap survey in the designated areas during the growing season of the melon. Fruit survey on melon fly host plants in the designated areas during the growing season of the melon. In the phytosanitary certification in the designated production areas (a part of excerpts) In the phytosanitary certificate, the following shall bear additional remarks: The fruit has been produced within the designated production areas which are confirmed by the Chinese Authorities to be free from the Melon
	内モンゴル自治区 Inner Mongolia Autonomous Region 遼寧省 Liaoning 吉林省 Jilin 黒龍江省 Heilongjiang 新彊ウイグル自治区 Xinjiang Yughur Autonomous Region	PUMPKIN		May, 2008		 Plants and areas Fresh squash shall be produced in the Neimenggu Autonomous Region, Liaoning Province, Jilin Province, Heilongjiang Province, and Xinjiang Republic of China, which is designated by the Director-General of the Food Safety and Consumer Affairs Bureau of the Ministry of Agriculture intensive trapping surveys and intensive fresh fruit surveys of melon flies set forth in Article 2. Surveys in the production areas Every year, from June 1 to September 30, trapping surveys shall be carried out. Fresh fruit surveys. Inspection and certification in the designated production areas (a part of excerpts) The phytosanitary certificate shall bear additional remarks that the subject fresh fruits were produced in the designated production area where That the subject fresh fruits were packed in a place designated by the Plant Quarantine Authorities of the People's Republic of China.
		LITCHI		April, 1994	ORIENTAL FRUIT FLY COMPLEX	After the following A treatment is done, the B treatment will be started. A Vapor Heat Treatment: The fresh Litchi shall be disinfested with saturated vapor in vapor heat treatment facilities. The temperature at the innermost fruit pulp shall B Cold Treatment: In the cold treatment facilities, fruit pulp temperature should be lowered to 2°C within 6 hours after vapor heat treatment and kept at the fruit
REPUBLIC OF CHII	Æ	CHERRY	1.SWEET HEART	December, 2005	CODLING MOTH	Methyl Bromide Fumigation:
			2.VAN 3.BING 4.LAPIN			cultivars 1 ~ 6 Dosage Temperature Duration of exposure Ratio of fruit capacity Cultivary Cultiva
			5.LAMBERT			64g/m³ 13.5°C or above 2 hours 20.5% or less (angle ked) 0 0.5 all the sublings including sublings in left 19.2% or less (packed)
			6.RAINIER			② Or all the cultivars including cultivars 1~6 Dosage Temperature Duration of exposure The production of the concentration of methyl bromide at the fumiga
						64g/m^3 13.5°C or above 2 hours or more 95.9 or up
				February, 2014		 Piants and areas Cherry fresh fruits shall be produced in areas designated by Chilean plant protection authorities to be subject to intensive trapping surverys a in Article 2. Surveys in designated production areas ① Trapping surveys @ Fresh fruit surveys ② Fresh fruit surveys 3. Inspection and Certification in Producing Area (a part of excerpts) The phytosanitary certificate shall include the following statements: (a) The fruit shall be produced at the designated area where Codling moths have not been trapped, and be produced in the designated producing a survey do not exceed 5 per trap per week on average as the result of surveys set forth in Article 2. Moreover, it shall be produced in the design detected as the result of fresh fruit surveys.
REPUBLIC OF TUR	KEY	GRAPEGRUIT LEMON		August, 2010 February, 2014	MEDITERRANEAN FRUIT FLY	Cold Treatment: Grapefruit The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, and keeps the same temperature for 16 consecutive days. Lemon The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers,
		LEMON		February, 2014		and keeps the same temperature for 12 consecutive days.
NEW ZEALAND		CHERRY	ALL VARIETY	December, 2005	CODLING MOTH	 Plants and areas Cherry fresh fruits shall be produced in areas designated by New Zealand plant protection authorities to be subject to intensive trapping surve forth in Article 2. Surveys in designated production areas Trapping surveys Fresh fruit surveys Fresh fruit surveys Inspection and Certification in Producing Area (a part of excerpts) The phytosanitary certificate shall include the following statements: (a) The phytosanitary certificate shall include the following statements: (b) The fruit shall be produced at the designated area where Codling moths have not been trapped, and be produced in the designated producing a survey do not exceed 15 per trap per week on average as the result of surveys set forth in Article 2. Moreover, it shall be produced in the design detected as the result of fresh fruit surveys.
		NECTARINE	1.FANTASIA 2.RED GOLD 3.FIREBRITE	December, 1988 December, 1989		Methyl Bromide Funigation Dosage Temperature Duration of exposure Ratio of fruit capacity 64g/m³ 12°C or above 2 hours 40% or less
		APPLE	1.GALA	May, 1993	OCODLING MOTH	After the following A treatment is done, the B treatment will be started.
			1.GALA 2.GRANNY SMITH 3.FUJI 4.BRAEBURN 5.RED DELICIOUS 6.ROYAL GALA 7.SCIROS	July, 2007	©FIRE BLIGHT	A Methyl Bromide Funigation: ① cultivars 1~7 Dosage Temperature Duration of exposure Ratio of fruit capacity 24g/m ³ 12°C or above 2 hours 40% or less 40% or less
			8.EXCEPT ABOVES	July, 2007 July, 2007		Dosage Temperature Duration of exposure Multiplication of Methyl Bromide concentration and fumigation tim 24g/ml 12°C or above 2 hours or more 34.2 or up B Cold Treatment: At cold treatment facilities, after the fruit pulp temperature reaches 2.0 °C, apple fresh fruits shall be disinfested at the fruit pulp temperature
ISLAMIC REPUBLIC	C OF PAKISTAN	MANGO	SINDHRI	January, 2011	①ORIENTAL FRUIT FLY COMPLEX	Vapor Heat Treatment:
			CHAUNSA		@MELON FLY	The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 47°C and more for 24

	MEANS OF CONVEYANCE
People's Republic of China, as the intensive trap survey	SHIP CARGO AIR CARGO
e Melon fly as the result of surveys set forth Article 2.	
Xinjiang Uygur Autonomous Region of the People's riculture, Forestry and Fisheries as an area under	
rea where no melon fly has been detected as the surveys.	
1 shall be raised to $46.5^{\circ}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	SHIP CARGO AIR CARGO ites.
the fruit pulp temperature of $2^\circ\!\mathrm{C}$ for 40 hours.	
	SHIP CARGO AIR CARGO
fumigation facilities by duration	
rverys and fresh fruit surveys for Codling moths set forth	
ducing area where the number of Codling moths in the e designated area where no Codling moths have been	
stainers, after the fruit pulp temperature reaches $0.3^\circ\!\mathrm{C}$	SHIP CARGO AIR CARGO
tainers, after the fruit pulp temperature reaches $0.8{\rm \widetilde{C}}$	
ng surveys and fresh fruit surveys for Codling moths set	SHIP CARGO AIR CARGO
ducing area where the number of Codling moths in the ne designated area where no Codling moths have been	
	SHIP CARGO AIR CARGO
tion time at a fumigation facility	
perature of 2.0 $^{\circ}\mathrm{C}$ or below for 25 consecutive days.	
re for 25 minutes.	SHIP CARGO AIR CARGO

COUNTRIES / DISTRICTS		ESH FRUITS	BAN-LIFTED YEAR	TARGET PESTS	TREATMENT OR OTHER MEASURES
REPUBLIC OF REPUBLIC OF PHILIPPINES	ITEMS MANGO	CULTIVARS MANILA SUPER	July, 1975	ORIENTAL FRUIT FLY COMPLEX	Vapor Heat Treatment:
AEFUBLIC OF REFUBLIC OF FHILIFFINES	MANGO	MANILA SUF ER	July, 1975	@MELON FLY	The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.0°C and more for 10 minutes.
	РАРАҮА	SOLO	April, 1994		Vapor Heat Treatment: The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.0°C and more for 70 minutes.
FRENCH REPUBLIC	APPLE	GOLDEN DELICIOUS	September, 1997	①MEDITERRANEAN FRUIT FLY ②CODLING MOTH ③FIRE BLIGHT	After the following A treatment is done, the B treatment will be started. A Methyl Bromide Fumigation: Dosage Temperature Duration of exposure B 30g/m ² 20°C or above 2 hours 4 49% or less B Cold Treatment: At cold treatment facilities, after the fruit pulp temperature reaches 1.0 °C and keeps the same treatment at and under 1.0°C for 50 consecutive days.
FEDERATIVE REPUBLIC OF BRAZIL	MANGO	TOMMY ATKINS	September, 2004	MEDITERRANEAN FRUIT FLY	Hot Water Treatment:
		KENT	July, 2008	-	The fruits shall be disinfested at the hot water dip treatment facilities by using hot water which temperature is 47°C and at the pulp temperature of 46°C and higher for 5min
SOCIALIST REPUBLIC OF VIET NAM	HYLOCEREUS UNDATUS	(Reference:) Scientific name Hylocereus undatus	October,2009	①ORIENTAL FRUIT FLY COMPLEX ②MELON FLY	Vapor Heat Treatment: The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.5°C for 40 minutes after a steady increase of pulp to 43.0°C.
KINGDOM OF BELGIUM	CUCUMBER TOMATO		December, 2003	MEDITERRANEAN FRUIT FLY	 1.Plants and areas Cucumbers and tomatoes shall be produced in sites (Designated Production Sites) designated by the Plant Quarantine Authority of Belgium as areas where no Mediterraneae occurred and satisfy the following conditions: Cucumbers and tomatoes shall be produced at the facility (Designated Production Facilities) designated by the Plant Quarantine Authority of Belgium. Cat the monitoring areas against Mediterranean fruit fly designated by Belgium Authority, they shall be the ones produced during the period that the authority confirms with fly after the occurrence survey mentioned in Article 2. 2.The Occurrence Survey in quarantine monitoring areas, designated production sites and designated production facilities Pheromone trap monitoring Orchard fruit monitoring Inspection and Certification in Producing Area (a part of excerpts) The phytosanitary certificate shall be mentioned the following additional remarks as the result of the occurrence survey mentioned in Article 2: The fruit shall be produced at the designated production facilities where no Mediterranean fruit flies have not been trapped in the designated producing areas where no Mediterranean fruit flies have not been trapped.
REPUBLIC OF PERU	MANGO	KENT	January,2010	MEDITERRANEAN FRUIT FLY	Hot Water Treatment: The fruits shall be disinfested at the hot water dip treatment facilities by using hot water of 47.0°C to keep the pulp temperature at 46.0°C and higher.
MALAYSIA	MANGO	HARUMANIS	May, 2008	©ORIENTAL FRUIT FLY COMPLEX @MELON FLY	Vapor Heat Treatment: The fruits shall be disinfested at vapor heat treatment facilities by using saturated vapor at the fruit pulp temperature of 46.5°C for 20 minutes after a steady increase in the temperature to 43.0°C without using vapor.
REPUBLIC OF SOUTH AFRICA	SWEET ORANGE	1.WASHINGTON NAVE 2.VALENCIA 3.TOMANGO 4.PROTEA	August, 1970 April, 1971	MEDITERRANEAN FRUIT FLY	Cold Treatment: The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temperature reaches minus 0.6 °C a temperature for 12 consecutive days.
	GRAPE FRUIT CLEMENTINE		June, 2007	-	Cold Treatment:
	CLEMENTINE		5une, 2007		The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temperature reaches -0.6 °C and ke temperature for 14 consecutive days.
	GRAPE	BARLINKA	April, 2010		Cold Treatment: The fruits shall be disinfested at cold treatment facilities, cold treatment vessels and refrigerated shipping containers, after the fruit pulp temperature reaches 0.8°C and kee
					temperature for 16 consecutive days.

	MEANS OF CONVEYANCE
ad more for 10 minutes.	SHIP CARGO AIR CARGO
d more for 70 minutes.	
	SHIP CARGO AIR CARGO
consecutive days.	
p temperature of $46^\circ\!\mathrm{C}$ and higher for 5minutes.	SHIP CARGO AIR CARGO
r 40 minutes after a steady increase of pulp temperature up	SHIP CARGO AIR CARGO
Belgium as areas where no Mediterranean fruit fly has uthority of Belgium. he period that the authority confirms with no spread of the	SHIP CARGO AIR CARGO
in Article 2: designated producing areas where no Mediterranean fruit	
46.0°C and higher.	SHIP CARGO AIR CARGO
r 20 minutes after a steady increase in the fruit pulp	SHIP CARGO AIR CARGO
it pulp temperature reaches minus $0.6^\circ\!\!\mathbb{C}$ and keeps the same	SHIP CARGO AIR CARGO
it pulp temperature reaches '0.6 $\rm \widetilde{C}$ and keeps the same	
it pulp temperature reaches $0.8^\circ\!\mathrm{C}$ and keeps the same	

Reference: TREATMENTS PROPOSED BY USA & MEXICO

COUNTRIES / DISTRICTS	FRESH FRUITS	Directorial Notice	TARGET PESTS	TREATMENT OR OTHER MEASURES	MEANS OF CONVEYANC
UNITED STATES OF AMERICA	ORANGE	June 19, 1990	CARIBBEAN FRUIT FLY	1. Methyl Bromide Fumigation:	SHIP CARGO
(From State of Florida)	GRAPE FRUIT LIME (EXCLUDING PERSIAN LIME) MANGO OTHER FRESH FRUITS (EXCLUDING SOUR LEMON, CITRUS LIMON) PRODUCED IN FLORIDA WHICH ARE	(2農蚕第3581号)		Dosage Duration of exposure Temperature Ratio of accommodation 40g/m ³ 2 hours 24°C - 29°C 20% or less	AIR CARGO
	KNOWN TO HOST CARIBFRLIES.				
	ORANGE GRAPE FRUIT	June 19, 1990 (2農蚕第3581号)		2. Cold Treatment (after the temperature at the innermost fruit pulp shall reach the following temperature)A) Orange, Grapefruit ,Pomelo, Tangerine, and Oroburonko	
	POMELO	October 22, 2008		① Usual treatment ② Short term treatment	
		(20消安第7951号)		Fruit temperature Duration of exposure	
	Tangerine Oroburonko	January 24, 2011 (22消安第7730号)		0.6°C(33 °F) 14 days 0.6°C(33 °F) 10 days 0.8°C(33.5°F) 16 days 1.1°C(34 °F) 12 days	
				$1.1^{\circ}\mathbb{C}(34^{\circ}\mathrm{F})$ $17 \mathrm{ days}$ $1.4^{\circ}\mathbb{C}(34.5^{\circ}\mathrm{F})$ $19 \mathrm{ days}$ $1.4^{\circ}\mathbb{C}(34.5^{\circ}\mathrm{F})$ $19 \mathrm{ days}$ $2.2^{\circ}\mathbb{C}(36^{\circ}\mathrm{F})$ $17 \mathrm{ days}$	
				1.7°C(35 °F) 20 days 1.9°C(35.5°F) 22 days 2.2°C(36 °F) 24 days	
				Note: In case Orange, Grapefruit ,Pomelo, Tangerine, and Oroburonko adapt to the following conditions, the short term treatment of the above ② shall be applied to them. ① The fruits shall be produced at the areas where the occurrence density of Caribbean fruit fly is low.	
				② At the time of export inspection, sampling fruits shall be kept at 26.7 °C for more than 10 days. After that, fruit cutting survey shall be done. As the result of the survey, there shall be no interception of Caribbean fruit fly.	
	CARAMBOLA	July 29, 1994		B) CARAMBOLA	
		(6農蚕第4621号)		Fruit temperatureDuration of exposure1.1°C(34°F)15 days	
	ORANGE GRAPE FRUIT ORO BLANCO TANGERINE POMELO	May 28, 1999 (11農産第2605号) October 22, 2008 (20消安第7951号)		 3. Shipping from the quarantine administrated area ① Judging from the results of trap treatment and bait spray implemented by US plant protection services, oranges, grape fruits, oroblanco, tangelin or pomelo shall be able to be imported without disinfection at the export country or at sea, if the fruits are produced at areas (quarantine administrated areas) where no Caribbean fruit flies have been detected, and also expected to be able to keep the situation maintained. In this case, it is very essential that the production area numbers or additional declaration shall be written in Phytosanitary Certificate issued by US plant protection services. ② The above Article ① is enforced in Florida. Therefore, prior adjustment with the export side is essential in importing the subject fresh fruits. 	
	MANGO	June 19, 1990		Hot Water Treatment:	
		(2農蚕第3581号)		 The fruits shall be disinfested at the hot water dip treatment facilities by using hot water at the pulp temperature of 46.1°C or higher and the temperature must not fall below 46.0°C for 90minute or more. The size of the fruit is no more than 8 and a container includes 8 fruits and the net weight is 5kg. The average weight is 625g, but each mango must not exceed 700g. 	es
UNITED MEXICAN STATE	MANGO	February 8, 1991	FRUIT FLY	1. Hot water dip treatment	SHIP CARGO
(Excluding State of Chiapas)		(3-12) May 22, 2008 (20消安第2213号)	(Genus : ANASTREPHA) : MEXICAN FRUIT FLY : SOUTH AMERICAN FRUIT FLY	The fruits shall be disinfested at the hot water dip treatment facilities by hot water at the pulp temperature of 46.1 °C or higher, (1) Elongated and flattened types (Francis and similar shaped mangoes) shall be treated as follows: ① 375 grams or less for 65minutes	AIR CARGO
		March 31, 2009 (20消安第13407号)		 ② from 375grams to 570grams for 75 minutes (2) Other varieties of mangoes shall be treated as follows: 	
				 500 grams or less for 75 minutes from 500 grams to 700 grams for 90minutes, from 700 grams to 900 grams for 110 minutes 	
				 (3) from 700 grams to 900 grams for 110 minutes 2. Forced hot air treatment The fruits shall be disinfested by hot wind of 50 °C until the pulp temperature reaches 48 °C. (The gross of a mango should be 700 grams or less.) 	
	FRESH CUT MANGO	May 30, 2012		1. Fresh Mango for fresh cut processing:	
	(Fresh mango by fresh cut processing)			Quarantine treatment based on Work Plan under the Japan/Mexico Agreement.	
				2. Record in phytosanitary certificate and labeling/seal of package:	
				 Same as fresh produce completed with quarantine treatment (But, not necessary to attach the label with importer's name to the fruit) Shall be written the registration number of processing facility (EMP04/02/003/001/2010) (in case of changes in the registration number, report to Japan as soon as possible) 	

Edited by Japan Fresh Produce Import and Safety Association (P.I.S.A). March, 2015

COUNTRIES / DISTRICTS	FRESH FRUITS	Directorial Notice	TARGET PESTS			TREATMENT OR OTHER MEASURES	MEANS OF CONVEYANCE
UNITED MEXICAN STATE	GRAPE FRUIT	December 25, 2006		1. Methyl Bromide Fumigat	tion		
(Excluding State of Chiapas)	ORANGE	(18消安第3742号)		Temperature	$21.1^{\circ}\text{C} - 29.0^{\circ}\text{C}$ (70°F — 85°F)		
		October 7, 2008		Dosage	40g/m^3		
		(20消安第7289号)		Duration of exposure	2 hours		
				Ratio of accommodation	less than 80%		
				Export inspection	there shall be no fruit fly of anastrepha genus.		
				2. Cold treatment (main shi	ip or refrigerated shipping container during sailing	gs)	
				Temperature	Duration of exposure		
1				0.6°C(33°F)	18 days		
				1.1°C(34°F)	20 days		
				1.7°C(35°F)	22 days		
				2.2°C(36°F)	24 days		
				0	l shipping container during sailing, the consignme	nt shall be loaded to the ship after the fruit pulp temperature of the consignment has reached the regulated treatment	
				temperature.			
				3. Forced hot air treatment			
				The fruits shall be disin	fested that the fruit pulp temperature reaches 44°	C within 90 minutes or more and then keeps the same temperature and more for 100 minutes.	
	GRAPE FRUIT (Citrus paradisi)	June 18, 2007		The shipment from designa	ted areas:		
	ORANGE (Citrus sinensis) MANDARIN (Citrus reticulata)	(17消安第13245号)				only for the subject fruits from the following areas, such as Sonora, Chihuahua, Baja California Sur, Sinaloa (restricted Sinaloa de Leyva) and an area approved as a pest free area of fruit flies of Anastrepha genus.	
	MANGO(Mangifera indica)			In this case, the Work F	Plan (maintenance activities of pest free areas, issu	ed phytosanitary certificate and its additional declaration, packaging seals etc.) from Mexico shall be indispensable.	
	GRAPE FRUIT		IEXICAN FRUIT FLY	The shipment from special s	states:		
		(24消安第4709号)		In case of grapefruit from disinfection.	m designated areas of the controlled states for Me	xican fruit fly (Nuevo Leon, Tamaulipas, Michoacan, Veracruz, Campeche and Yucatan), import is allowed without any	
				In this case, measures (of Mexico shall be indis		issued phytosanitary certificate and its additional declaration, designation of packaging facility, etc.) based on the protoco	bl