

# PLS and Pesticide MRL Setting in Korea



Jin Sook Kim

Residue and Contaminant Standard Division  
Ministry of Food and Drug Safety



Ministry of Food and  
Drug Safety



# Outline



**1 Current Pesticide MRL System**



**2 Positive List System in Korea**



**3 MRL setting(Import tolerance)**



Ministry of Food and  
Drug Safety

# **1. Current Pesticide MRL System**



## Status of pesticide MRL in Korea

The number of agricultural commodities : 211

The number of pesticides : 469

The total number of MRLs : 7,941

## What are the pesticide MRLs set in Korea?

- ① Pesticide MRLs registered for use in Korea
- ② Pesticide MRLs established through import tolerance(†)
- ③ Pesticide MRLs set based on international standards  
in the past (To be deleted ~2021.12)





# Current Pesticide MRL System



- ✓ MRLs for individual crops or crop groups, and processed foods  
ex) Food Code [Annex 3]

(18) 디캄바(Dicamba) ADI : 0.3 mg/kg b.w./day  
○ 잔류물의 정의(Residue definition) : Dicamba

귀리(Oat) 0.5<sup>T</sup>

대두(Soybean) 10<sup>t</sup>

수수(Sorghum) 0.1

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Reference: 1) Food code ([www.mfds.go.kr](http://www.mfds.go.kr))  
2) Pesticide MRLs in Food ([www.foodnara.go.kr/residue](http://www.foodnara.go.kr/residue) >Downloads>

**If there are no pesticide MRLs?**



# No MRLs?



✓ Provisional MRLs, then (2016.12.31.~2018.12)

## *Principle of Provisional MRLs*

- ① *The Codex standard*
  - ② *Not applied ①, then the lowest of the MRL in similar agricultural products*
  - ③ *Not applied ①, ②, then lowest of the MRL, among MRLs of the pesticide detected.*
- \* *If MRL for nuts and seeds, and tropical fruits is not established, default MRLs of 0.01 mg/kg will be adapted.*



# What are the problems of provisional MRLs?

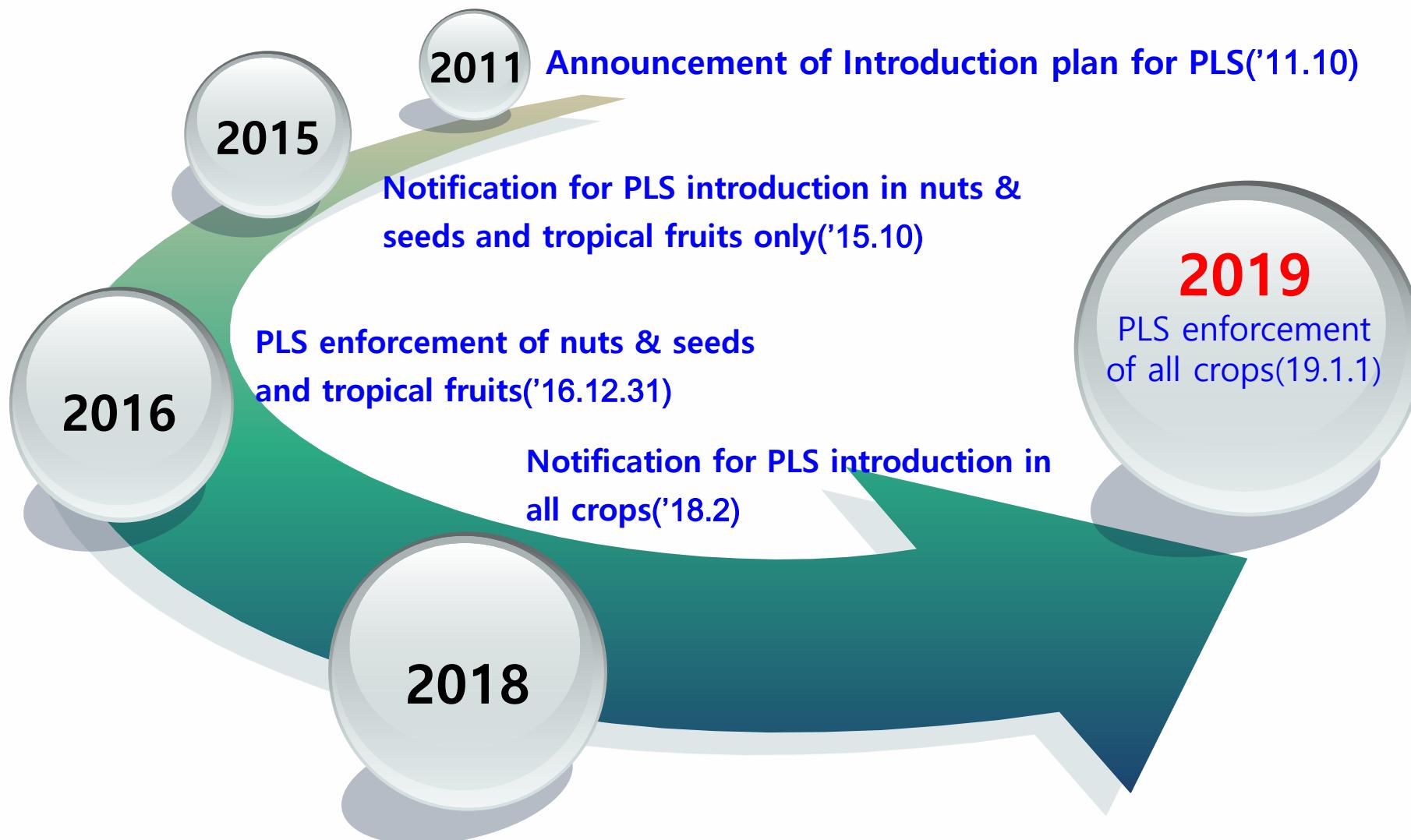


- ① Can not be managed safely if unregistered pesticides are used
- ② May change several times a year and cause confusion in the application of MRLs
  - When codex MRL and the lowest MRL of belong to the same subcategory changes
- ③ Difficult to assess the correct intake of the population because it is missing from the intake
- ④ May be imported even if it does not meet the MRL of the producing country

## **2. Positive List System**



# Progress of PLS introduction and Plans





# Pesticide management system for many countries



Countries implementing PLS or Zero Tolerance



# Positive List System



## Positive List System in Korea

If there is no pesticide MRL or

If the pesticide is not set MRL by import tolerance,

Its MRL  $\leq$  0.01 mg/kg

## Why?

- ✓ Scientifically manage through accurate assessment of intake.
- ✓ Prevent excess use and misuse of pesticide
- ✓ Inhibit use of non-registered pesticides which are not evaluated by scientific assessment



# Changes in management system after introduction of PLS



## *Current system*

### ① MRLs already set

(Pesticide registered for use or reviewed by IT)

→ Apply the existing MRLs

### ② MRLs that have no scientific basis

→ Apply the existing MRLs

### ③ MRLs are not established

→ Apply codex MRLs and the lowest MRLs for the same subcategory

→ Can be distributed

## *Future Plan*

### ① MRLs already set

(Pesticide registered for use or reviewed by IT)

→ Apply the existing MRLs

### ② Remove MRLs

(After a period of time for IT setting:'21.12)

- **Apply default MRL of 0.01 ppm**

### ③ MRLs are not established

- **Apply default MRL of 0.01 ppm**

\* Possible to set the MRLs based on the submitted data if you need a MRL setting (Import tolerance, IT)

# Pesticide PLS in Korea

## 1<sup>st</sup>: Nuts/seeds and Tropical fruits

Enforcement : from 2016.12.31.

Administrative notice : 2014. 7, Notification No.2015-78 (2015.10.29)

Large classification	Small classification	Commodity
Tree Nuts and Oilseeds (except Peanut)	Tree Nuts	Chestnut, Walnut, Gingko nut, Pine nut, Almond, Pecan, Cashews, Hazelnut, Macadamia, Pistachio, Acorn etc.
	Oilseeds	Sesame, Cotton Seeds, Sunflower, Canola Seeds, Palm, Olive, Safflower etc.
	Seeds for beverages and sweets	Coffee beans, Cacao beans, Cola nuts, Guarana

\* MRLs of no-registered pesticide → uniform level(same time with 2<sup>nd</sup> PLS enforcement)

## 2<sup>nd</sup>: Other crops

Enforcement : 2019.1.1.

Administrative notice : 2017, Notification No.2018-8 (2018.2.2)



# Changes in Group MRLs



## Current System

- Group MRLs  
nuts, tropical fruits, citrus,  
legume
- Import Tolerance?  
Application for representative crops  
Group MRLs requirement for remark

## Future Plan

- Group MRLs  
All crops
- Import Tolerance?  
Same



# Suggestions for PLS



- ① Request to maintain current MRLs until IT are set.  
⇒ We will postpone the deletion until Dec 2021.
- ② Please, accept the codex MRLs.  
⇒ It is reasonable to set the MRLs through the evaluation according to the principle.
- ③ Please, release evaluation report.  
⇒ From last year the MRLs setting report is posted on the MFDS homepage.



# Policy for smooth introduction of PLS



## ① Expanding Group MRLs

Beans, Citrus fruits, Tree nuts, Tropical fruits

→ All agricultural products available

② In the case of generic pesticides, it is possible to substitute the data necessary for IT application with codex, US, EU, Japan MRL setting data.

- Recommendation of IT application through food industry and embassies of each country

③ Minor crops(Leafy, Stalk and stem vegetables) cultivated domestically are set group MRLs based on its own research project.



# Policy for smooth introduction of PLS



## for Minor Crop

No.	Pesticide name	MRL (mg/kg)
1	Myclobutanil	Leafy vegetables 2.0, Stalk and stem vegetables 0.2
2	Imidacloprid	Leafy vegetables 3.0, Stalk and stem vegetables 2.0
3	Padobutrazol	Leafy vegetables 2.0
4	Propamocarb	Leafy vegetables 25, Stalk and stem vegetables 25
5	Hexaconazole	Leafy vegetables 0.7, Stalk and stem vegetables 0.2
6	Tebufenozide	Leafy vegetables 10, Stalk and stem vegetables 7.0
7	Fosthiazate	Leafy vegetables 0.5, Stalk and stem vegetables 1.0
8	Abamectin	Leafy vegetables 0.2, Stalk and stem vegetables 0.07
9	Emamectin benzoate	Leafy vegetables 0.05, Stalk and stem vegetables 0.1
10	Pyrimethanil	Leafy vegetables 10, Stalk and stem vegetables 5.0
11	Fenhexamid	Leafy vegetables 30, Stalk and stem vegetables 10
12	Pyraclostrobin	Leafy vegetables 15, Stalk and stem vegetables 3.0
13	Novaluron	Stalk and stem vegetables 5.0
14	Methoxyfenozide	Leafy vegetables 7.0, Stalk and stem vegetables 2.0
15	Metconazole	Leafy vegetables 3.0, Stalk and stem vegetables 1.0
16	Metrafenon	Stalk and stem vegetables 5.0



# Policy for smooth introduction of PLS



## for Minor Crop

No.	Pesticide name	MRL (mg/kg)	No.	Pesticide name	MRL (mg/kg)
1	Diflubenzuron	Stalk and stem vegetables(3.0)	2	Metalaxyl	Leafy vegetables(5.0), Stalk and stem vegetables(0.2)
3	Biteranol	Stalk and stem vegetables(10)	4	Bifenthrin	Leafy vegetables(2.0), Stalk and stem vegetables(0.07)
5	Cyhalothrin	Leafy vegetables(2.0), Stalk and stem vegetables(0.3)	6	Fenarimol	Leafy vegetables(2.0), Stalk and stem vegetables(1.0)
7	Chlorfenapyr	Leafy vegetables(5.0), Stalk and stem vegetables(3.0)	8	Flufenoxuron	Stalk and stem vegetables(2.0)
9	Dimethromorph	Leafy vegetables(30), Stalk and stem vegetables(7.0)	10	Diethofencarb	Leafy vegetables(30), Stalk and stem vegetables(15)
11	Acetamiprid	Leafy vegetables(5.0), Stalk and stem vegetables(1.0)	12	Azoxystrobin	Leafy vegetables(20), Stalk and stem vegetables(3.0)
13	Kresoxim-methyl	Leafy vegetables(25), Stalk and stem vegetables(2.0)	14	Chlorfluazuron	Leafy vegetables(5.0), Stalk and stem vegetables(2.0)
15	Fludioxonil	Leafy vegetables(15), Stalk and stem vegetables(5.0)	16	Lufenuron	Leafy vegetables(5.0), Stalk and stem vegetables(3.0)
17	Acrinathrin	Leafy vegetables(5.0), Stalk and stem vegetables(1.0)	18	Flutolanil	Leafy vegetables(15), Stalk and stem vegetables(10)
19	Boscalid	Stalk and stem vegetables(30)	20	Cyazofamid	Leafy vegetables(10), Stalk and stem vegetables(2.0)
21	Clothianidin	Stalk and stem vegetables(1.0)	22	Ethaboxam	Leafy vegetables(15), Stalk and stem vegetables(7.0)
23	Pyridalyl	Leafy vegetables(15), Stalk and stem vegetables(7.0)			

\* Pesticides that are under review in 2018(15 kinds of)

- Amisulbrom, Fenazaquin, Cyclaniliprole, Fluazinam, Flubendiamide, Mandipropamid, Metaflumizone, Mandestrobin, Picoxystrobin, Spinetoram, Spirodiclofen, Tebuconazole, Tebufenpyrad, Teflubenzuron, Sulfoxaflor



# Caution on exporting crops to Korea



- ✓ Check if the MRL of pesticide you want to use is set in Korea([www.foodsafetykorea.kr/foodcode](http://www.foodsafetykorea.kr/foodcode))
  - MRL set → Available(Please note that there is a risk of exceeding the MRL when spraying the pesticide soon at the harvest time.)
  - No MRL set → Please do not use
- ✓ If you need to use pesticides that have no MRL in Korea→ Please apply to Import tolerance



# Inspection of pesticide on imported food



- ✓ The number of pesticides analyzed by Multi-residue Methods  
**286 → 370('17.1~)**
  - \* Including 134 species of pesticide not set in domestic MRL
- ✓ Individual residue analysis according to hazard issues raised in and out of country
  - \* Inspect 10-12 species per quarter according to the hazard issues
- ✓ Conduct laboratory test five times on rejected crops





# Manual on Import tolerance application



✓ **Subject** : Pesticide for which it is legally allowed to be used in exporting countries

✓ **Required documents**

- New pesticides : Data on the toxicity and residues of pesticides on crop
- Add MRLs : Data on the residues of pesticides on crop

✓ **Required field test methods**

- Same as the method required by Codex

✓ **How to apply**

- Apply through pesticides company in Korea or consultant (Recommended)
- Apply directly to MFDS([inukioo@korea.kr](mailto:inukioo@korea.kr))

\* Prior review required before application, There is a service fee for application

## ❖ Want to know the first precise test items in Korea?

※ Multi-residue Analysis(58 pesticides)

번호	농약명	기준설정 여부	번 호	농약명	기준설정 여부	번 호	농약명	기준설정 여부
1	Acetamiprid	O	21	Dimethoate	O	41	Parathion-Methyl	O
2	Atrazine	X	22	Endosulfan	O	42	Permethrin	O
3	Azoxystrobin	O	23	Ethion	O	43	Phenthroate	O
4	BHC	O	24	Fenarimol	O	44	Phosmet	O
5	Bifenthrin	O	25	Fenhexamid	O	45	Pirimicarb	O
6	Boscalid	O	26	Fenitrothion	O	46	Pirimiphos-methyl	O
7	Captan	O	27	Fenpropathrin	O	47	Prochloraz	O
8	Carbaryl	O	28	Fenvalerate	O	48	Procymidone	O
9	Carbofuran	O	29	Flubendiamide	O	49	Profenofos	O
10	Chlorfenapyr	O	30	Fludioxonil	O	50	Pyraclostrobin	O
11	Chlorothalonil	O	31	Flufenoxuron	O	51	Pyrimethanil	O
12	Chlorpyrifos	O	32	Imazalil	O	52	Quintozene	O
13	Chlorpyrifos-methyl	O	33	Iprodione	O	53	Thiamethoxam	O
14	Cyhalothrin	O	34	Isoprothiolane	O	54	Tolclofos-methyl	O
15	Cypermethrin	O	35	Malathion	O	55	Triadimefon	O
16	Cyprodinil	O	36	Methidathion	O	56	Triazophos	O
17	DDT	O	37	Methomyl	O	57	Triflumizole	O
18	Diazinon	O	38	Methoxyfenozide	O	58	Triflumuron	O
19	Dichlorvos	O	39	Paclobutrazol	O	59		
20	Dicofol	O	40	Parathion	O	60		

❖ Want to know the random sampling test items in Korea?  
 ❖ Multi-residue Analysis(370 pesticides)

No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
1	2,6-Diisopropyl-Naphthalene(DIPN)	x	21	Bromobutide	o	41	Chloroneb	x
2	Acrinathrin	o	22	Bromophos-methyl	x	42	Chlorpropionate	x
3	Aldrin & dieldrin	o	23	Bromopropylate	o	43	Chlorothalonil	o
4	Allethrin	x	24	Bupirimate	x	44	Chlorpyrifos	o
5	Alldochlor	x	25	Butafenacil	x	45	Chlorpyrifos-methyl	o
6	Ametryn	x	26	Butralin	x	46	Chlorthal-dimethyl	x
7	Anilofos	o	27	Butylate	x	47	Chlorthion	x
8	Aspon	x	28	Cadusafos	o	48	Chlorthiophos	x
9	Atrazine	x	29	Captan	o	49	Chlozoline	x
10	Azaconazole	x	30	Carbophenothion	o	50	Cinmethylin	x
11	Azinphos-ethyl	x	31	Chinomethionate	o	51	Cyanazine	x
12	Azinphos-methyl	o	32	Chlorbufam	x	52	Cyanophos	x
13	Benalaxyl	o	33	Chlordane	o	53	Cycloate	x
14	BHC	o	34	Chlorethoxyfos	x	54	Cyflufenamid	o
15	Lindane( $\gamma$ -BHC)	o	35	Chlorfenapyr	o	55	Cyfluthrin	o
16	Benodanil	x	36	Chlorfenson	x	56	Cyhalofop-butyl	o
17	Benzoylprop-ethyl	x	37	Chlorfluazuron	o	57	Cyhalothrin	o
18	Bifenox	o	38	Chlorflurenol-methyl	x	58	Cypermethrin	o
19	Bifenthrin	o	39	Chloridazon	x	59	Cyproconazole	o
20	Bromacil	o	40	Chlorobenzilate	o	60	Cyprodinil	o

No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
61	Deltamethrin	o	81	Dioxathion	x	101	Etrimfos	o
62	Desmetryn	x	82	Diphenamid	o	102	Fenamidone	o
63	Diallate	x	83	Diphenylamine	o	103	Fenarimol	o
64	Diazinon	o	84	Dithiopyr	o	104	Fenazaquin	o
65	Dichlofenthion	x	85	DDT	o	105	Fenbuconazole	o
66	Dichlofluanid	o	86	Edifenphos	o	106	Fenchlorphos	x
67	Dichlormid	x	87	Endosulfan	o	107	Fenfuram	x
68	Dichlorvos	o	88	Endrin	o	108	Fenitrothion	o
69	Dicloran	o	89	EPN	o	109	Fenobucarb	o
70	Dicofol	o	90	Epoxiconazole	o	110	Fenothiocarb	o
71	Diethyl-ethyl	x	91	EPTC	x	111	Fenoxyanil	o
72	Diethofencarb	o	92	Esprocarb	o	112	Fenoxy carb	o
73	Diflufenican	x	93	Etaconazole	x	113	Fenpropathrin	o
74	Dimepiperate	o	94	Ethalfluralin	o	114	Fenson	x
75	Dimethachlor	x	95	Etofenprox	o	115	Fenthion	o
76	Dimethenamid	o	96	Ethion	o	116	Fenvalerate	o
77	Dimethoate	o	97	Ethofumesate	x	117	Fipronil	o
78	Dimethylvinphos	o	98	Ethoprophos	o	118	Flamprop-isopropyl	x
79	Diniconazole	o	99	Etoxazole	o	119	Flonicamid	o
80	Dinitramine	x	100	Etridiazole	o	120	Fluchloralin	x

No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
121	Fludioxonil	o	141	Heptenophos	x	161	Mefenacet	o
122	Flufenpyr-ethyl	x	142	Hexachlorbenzene	x	162	Mefenpyr-diethyl	x
123	Flumetralin	x	143	Hexaconazole	o	163	Mepronil	o
124	Flumiclorac-pentyl	x	144	Imazalil	o	164	Metconazole	o
125	Flumioxazine	o	145	Indanofan	o	165	Methidathion	o
126	Fluopyram	o	146	Indoxacarb	o	166	Methoprottryne	x
127	Fluorodifen	x	147	Iprobenfos	o	167	Methoxychlor	o
128	Flurochloridone	x	148	Iprodione	o	168	Quintozene	o
129	Flurtamone	x	149	Iprovalicarb	o	169	Methyl trithion	x
130	Flusilazole	o	150	Isazofos	o	170	Metolachlor	o
131	Fluthiacet-methyl	x	151	Isofenphos	o	171	Metrafenone	o
132	Flutolanil	o	152	Isofenphos-methyl	x	172	Metribuzin	o
133	Flutriafol	o	153	Isopropalin	x	173	MGK-264	x
134	Fluvalinate	o	154	Isoprothiolane	o	174	Molinate	o
135	Folpet	o	155	Isoxathion	x	175	Myclobutanil	o
136	Fonofos	x	156	Kresoxim-methyl	o	176	Napropamide	o
137	Fosthiazate	o	157	Lactofen	x	177	Nitrapyrin	o
138	Fthalide	o	158	Leptophos	x	178	Nitrothal-isopropyl	x
139	Halfenprox	o	159	Malathion	o	179	Nonachlor	x
140	Heptachlor	o	160	Mecarbam	o	180	Nuarimol	o

No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
181	Ofurace	o	201	Probenazole	x	221	Pyriminobac-methyl	o
182	Oxadixyl	o	202	Prochloraz	o	222	Quinalphos	o
183	Paclobutrazol	o	203	Procymidone	o	223	Quinoxifen	x
184	Parathion	o	204	Profenofos	o	224	Secbumeton	x
185	Parathion-methyl	o	205	Profluralin	x	225	Simeconazole	o
186	Pebulate	x	206	Prometon	x	226	<b>Spiroxamine</b>	<b>o</b>
187	Penconazole	o	207	Pronamide	x	227	Sulfotep	x
188	Pendimethalin	o	208	Propachlor	o	228	Sulprofos	x
189	Permethrin	o	209	Propazine	x	229	TCMTB	x
190	Phentoate	o	210	Propetamphos	x	230	Tebuconazole	o
191	Pentoxazone	o	211	Propham	x	231	Tebufenpyrad	o
192	Phosalone	o	212	Propisochlor	o	232	Tebupirimfos	o
193	Phosmet	o	213	Prothiofos	o	233	Tefluthrin	o
194	Phosphamidone	o	214	Pyracarbolid	x	234	Terbacil	x
195	Picolinafen	x	215	Pyraclofos	o	235	Terbufos	o
196	Picoxystrobin	o	216	Pyrazophos	o	236	Terbumeton	x
197	Piperophos	o	217	Pyridaben	o	237	Terbutylazine	o
198	Pirimicarb	o	218	Pyridalyl	o	238	Tetrachlorvinphos	x
199	Pirimiphos-ethyl	o	219	Pyrifenoxy	x	239	Tetraconazole	o
200	Pirimiphos-methyl	o	220	Pyrimidifen	o	240	Tetradifon	o

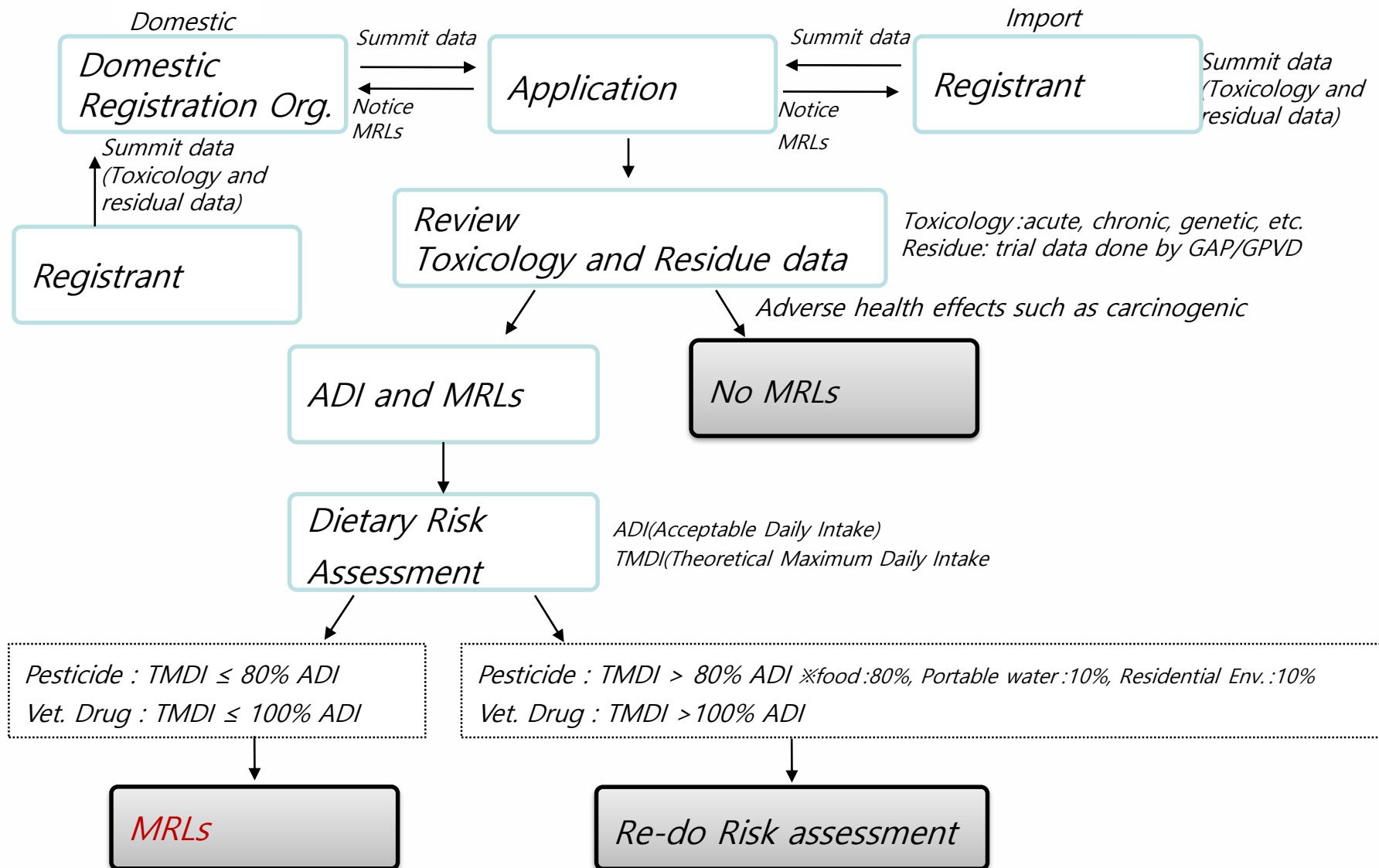
No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
241	Tetramethrin	x	261	Aldicarb	o	281	Clothianidin	o
242	Tetrasul	x	262	Amisulbrom	o	282	Cyazofamid	o
243	Thiazopyr	o	263	Asulam	x	283	Cycloprothrin	o
244	Thifluzamide	o	264	Azamethiphos	x	284	Cymoxanil	o
245	Thiometon	o	265	Azoxystrobin	o	285	Dicrotophos	x
246	Tolclofos-methyl	o	266	Bendiocarb	o	286	Dimethomorph	o
247	<b>Tolfenpyrad</b>	<b>o</b>	267	Bensulide	x	287	Ethaboxam	o
248	Tolyfluanid	o	268	Benzoximate	o	288	Ethametsulfuron-methyl	x
249	Triadimefon	o	269	Bixafen	x	289	Ethiofencarb	o
250	Triadimenol	o	270	Boscalid	o	290	Fenhexamid	o
251	Triazophos	o	271	Butocarboxim	x	291	Fenpyroximate	o
252	Tribufos	x	272	Carbaryl	o	292	Ferimzone	o
253	Triflumizole	o	273	Carbetamide	x	293	Fluacrypyrim	o
254	Triflumuron	o	274	Carbofuran	o	294	Fluazinam	o
255	Trifluralin	o	275	Chlorantraniliprole	o	295	Flubendiamide	o
256	Uniconazole	x	276	Chlorimuron-ethyl	x	296	Flufenacet	o
257	Vernolate	x	277	Chlorobenzuron	x	297	Flufenoxuron	o
258	Vinclozolin	o	278	Chlorotoluron	x	298	Fluometuron	x
259	Zoxamide	o	279	Chromafenozyde	o	299	Fluquinconazole	o
260	Acetamiprid	o	280	Cinosulfuron	o	300	Fluridone	x

No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea	No.	Pesticide	Setting MRLs in Korea
301	Flusulfamide	o	325	Metominostrobin	x	349	Quinoclamine	o
302	Forchlorfenuron	o	326	Metosulam	x	350	Rimsulfuron	x
303	Hexaflumuron	o	327	Nitenpyram	x	351	Spirodiclofen	o
304	Imazamox	x	328	Novaluron	o	352	Sulfentrazone	x
305	Imazapic	o	329	Oxamyl	o	353	Tebufenozide	o
306	Imazaquin	x	330	Oxaziclomefon	o	354	Tebuthiuron	x
307	Imazethapyr	o	331	Phenmedipham	x	355	Teflubenzuron	o
308	Imibenconazole	o	332	Pinoxaden	x	356	Tepraloxymid	x
309	Ipconazole	o	333	Promecarb	x	357	Thenylchlor	o
310	Isoprocarb	o	334	Propaquizafop	o	358	Thiacloprid	o
311	Isoproturon	x	335	Propoxur	o	359	Thiamethoxam	o
312	Isoxaben	x	336	Propyrisulfuron	o	360	Tiadnil	o
313	Lenacil	x	337	Prosulfocarb	x	361	Tralkoxydim	x
314	Lufenuron	o	338	Prothioconazole	x	362	Triasulfuron	x
315	Malaoxon	x	339	Pyraclonil	o	363	Tribenuron-methyl	x
316	Mepanipyrim	o	340	Pyraclostrobin	o	364	Tricyclazole	o
317	Mesosulfuron-methyl	x	341	Pyraflufen-ethyl	o	365	Tridemorph	x
318	Metamifop	o	342	Pyrazolate	o	366	Trifloxystrobin	o
319	Metamitron	x	343	Pyribenzoxim	o	367	Trifloxysulfuron	x
320	Methabenzthiazuron	o	344	Pyributicarb	o	368	Trimethacarb	x
321	Methiocarb	o	345	Pyridate	x	369	Triticonazole	x
322	Methomyl(thiodicarb)	o	346	Pyrimethanil	o	370	XMC	x
323	Methoxyfenozide	o	347	Pyriproxyfen	o			
324	Metolcarb	o	348	Pyroquilon	x			

### **3. MRL Setting (Import tolerance)**

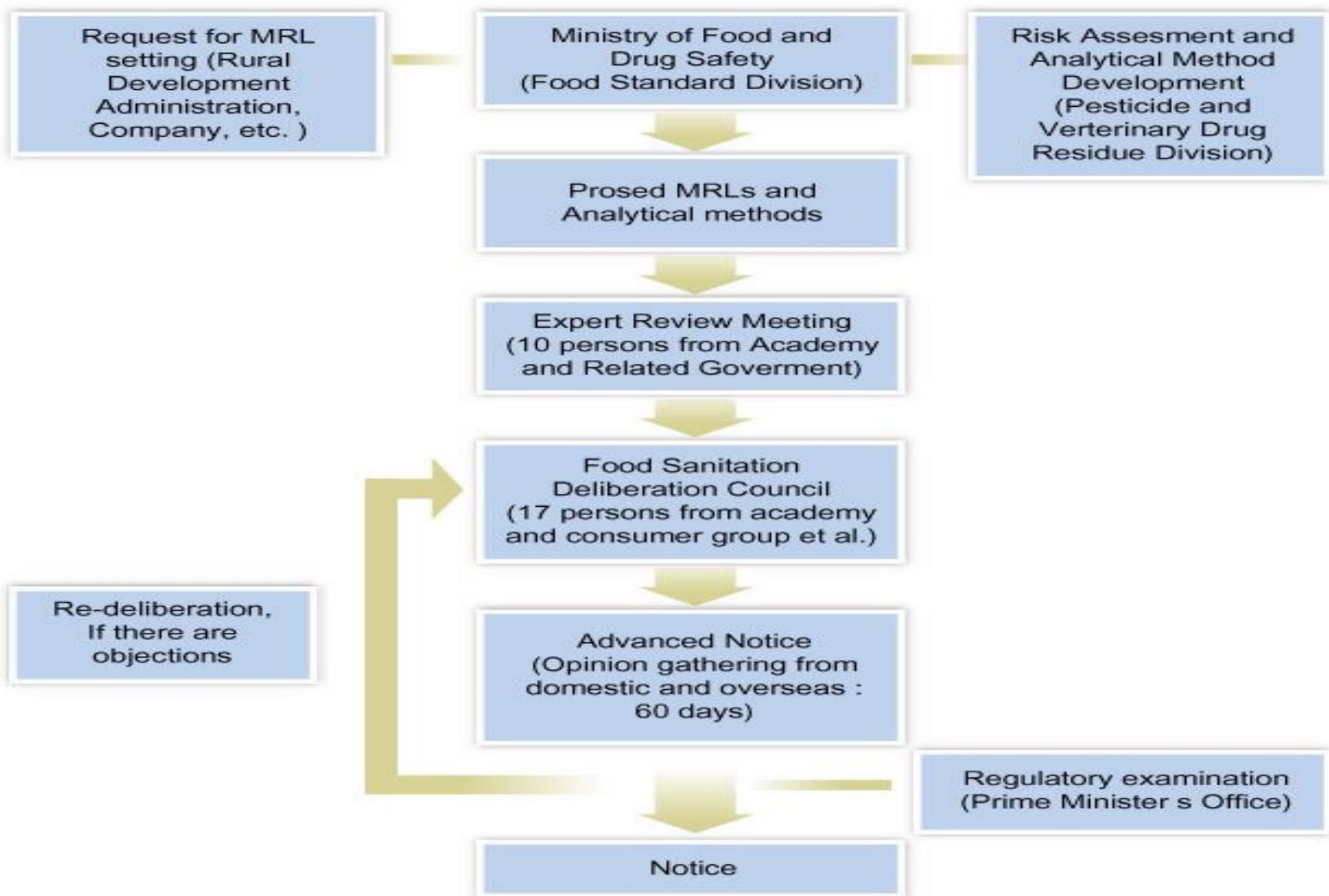


# Procedure of MRLs setting





# Procedure of IT MRLs setting





# Import Tolerance



1. Application via on-line
  - <http://www.foodsafetykorea.go.kr>
2. Processing period
  - Establishment of MRL : 365 working days
  - Exemption of MRL : 210 working days

\* Complementation: Max. 2 times, 6 months
3. Processing cost
  - 1) Toxicology data (per pesticide)
    - New MRLs: 30,000,000 KRW (about \$25,000)
    - Change or Exemption of MRL : 10,000,000 KRW (about \$8,500)
  - 2) Residue data
    - Pesticide: 5,000,000 KRW (per crop) (about \$4,500)
    - Veterinary drug: 10,000,000 KRW (per animal) (about \$8,500)

## 4. Data Requirement

- 1) Minimum of 6 field trials for major crop
  - except for minor crop or group MRL(codex)
  - minimum of 4 data for post harvest
- 2) IT for non-registered pesticide in Korea (Food code [Annex 8])
  - Toxicology data and summary
  - 1 hard copies of residue data and summary of GAP
    - \* Summary should be prepared in Korean
- 3) Additional MRLs for crops
  - The approved label
  - 1 hard copies of residue data and summary of GAP
  - For Generic pesticide, it might be possible to use evaluation reports (such as US or CODEX JMPR evaluation) instead of original residue data.



# Principle of MRL setting



## < Individual crops >

- \* MRLs proposal method
- Assessment based on codex guide line(FAO manual and etc) or EU evaluation manual
- In the same field trials, when the formulation, dilution rate, etc. are different, the treatment with the highest residue is selected
- The residue of each field trials is selected by the average value of the residue
- Derive the OECD calculator value using the residues from each field trials

→ The OECD calculator value is proposed as a MRL. We also consider the codex MRL if the submitted data is identical to the data reviewed by the codex.

- \* MRL of countries that have performed field trials or applied for IT, and MRL for major exporting countries can be considered.



# Principle of MRL setting



## < Set group MRLs ① >

- Residue data of representative crops of each group should be submitted.
  - GAP and residual patterns should be similar.
  - Group MRLs can be set when the median value of representative crops is within 5 times.
- The OECD calculator value or the OECD calculator value of the crop with the highest residue is set to the group MRLs by comparing the similarity of the residue patterns between the crops.



# Principle of MRL setting



## < Set group MRLs ② >

- If some of the representative crops already have IT MRL set, you can apply for group MRL by adding the remaining crops.
- When there are two representative crops and you have data for more than three crops, if you want to set reasonable MRL, please submit additional data in addition to the two representative crops(No fees will be charged for additional submitted data).
  - \* Preliminary review is necessary because the data of the representative crop must meet the principle of group MRL setting
- Berries require three representative crops, it is possible to set group MRL by using more than one crop of *Vaccinium spp*, and *Rubus spp* and other berries.



# ❖ The commodity group classification



Type	Group	Representative commodity	Commodity
Cereal grains	–	Rice	<u>Rice</u>
		Wheat	<u>Wheat</u>
		Maize	<u>Maize</u>
		Commodities of three or more (including wheat)	<u>Barley</u> , <u>Buckwheat</u> , <u>Foxtail</u> , <u>Sorghum</u> , <u>Oats</u> , <u>Rye</u> , <u>Job's tear</u> , <u>Proso millet</u> , <u>Japanese-barnyard millet</u> , <u>Quinoa</u> , <u>Triticale</u> etc
Potatoes	–	Potato, Sweet potato	<u>Potato</u> , <u>Sweet potato</u> , Taro, Yam, Cassava(tapioca), Konjac etc
Beans* (legume)	–	Commodities of two or more (including Soybean or beans or Pea)	<u>Soybean</u> , Mung bean, Pea, Kidney bean, Cowpea, Red bean, Broad bean, Pigeon pea, Lima bean, Chick-pea, Green bean, Lentils, Jack bean etc
Nuts and oilseeds	Peanut or nuts	Peanut	<u>Peanut</u>
		Commodities of two or more	<u>Chestnut</u> , <u>Walnut</u> , <u>Gingko nut</u> , <u>pine nut</u> , <u>almond</u> , <u>pecan</u> , <u>Cashew nut</u> , <u>Hazel nut</u> , <u>Macadamia</u> , <u>Pistachio</u> , <u>Acorn</u> etc
	Oilseed	Commodities of three or more	<u>Sesame</u> , <u>Cotton Seed</u> , Sunflower seed, Pumpkin Seed, Perilla-seed, Olive, Evening primrose seed, <u>Rape seed</u> , Plum tree, Safflower, Hempseed, Ben Moringa seed etc
	Seed for Beverage and sweets	Coffee bean, Cacao bean	<u>Coffee bean</u> , <u>Cacao bean</u> , Cola nut, Guarana

\* Beans: *Phaseolus* spp., *Pisum* spp.

Type	Group	Representative commodity	Commodity
Fruits	Pome fruits	Apple, Pear	<u>Apple</u> , <u>Pear</u> , Quince, Persimmon, Pomegranate etc
	Citrus fruits	Commodities of three or more	<u>Mandarin</u> , <u>Orange</u> , <u>Grapefruit</u> , <u>Lemon</u> , Chironga(orangelo), Lime, Oval kunquat, Hardy orange, Citron etc
	Stone fruits	Commodities of three or more (including peach)	<u>Peach</u> , <u>Jujube</u> , <u>Apricot</u> , <u>Plum</u> , <u>Japanese plum</u> , <u>Cherry</u> , Nanking cherry, San-su-yu, Schisandraberry etc
	Berries and other small fruits	Commodities of four or more	<u>Grape</u> , <u>Strawberry</u> , Goji berry, Akebia, Berries [ <u>Blueberry</u> , <u>Craneberry</u> , <u>Currant</u> , <u>Raspberry</u> , <u>blackberry</u> , <u>Korean raspberry</u> , <u>Mulberry</u> ] etc
	Assorted tropical and sub-tropical fruits	Commodities of three or more (including banana, pineapple)	<u>Banana</u> , <u>Pineapple</u> , <u>Kiwifruit</u> , <u>Avocado</u> , <u>Papaya</u> , Date, <u>Mango</u> , Guava, Coconut, <u>Litch</u> , Passion fruit, Durian, Mangosteen, <u>Longan</u> , <u>Fig</u> , <u>Dragon fruit</u> , Soursop etc

\* Berries: *Vaccinium* spp. *Rubus* spp.

Type	Group	Representative commodity	Commodity
Vegetables	Flowerhead brassicas	Commodities of two or more	<u>Korean cabbage head</u> , <u>Cabbage(including Brussels sprouts )</u> , <u>(including Cauliflower)</u> etc
	Leafy vegetables	Commodities of three or more	<u>Korean cabbage</u> (including <u>Ssam cabbage</u> , <u>Seasoned cabbage</u> ), <u>Lettuce</u> , <u>Lettuce head</u> , <u>Spinach</u> , <u>Perilla Leaves</u> , <u>Crown daisy</u> , <u>Marsh mallow</u> , <u>Chard</u> , <u>Butterbur</u> , <u>Radish</u> (including <u>leaves</u> , <u>young radish</u> ), <u>Chwinamul</u> , <u>(Gomchwi</u> , <u>chamchwi</u> , <u>Asian goldenrod</u> ), <u>Papper leaves</u> , <u>Chamnamul</u> , <u>Kale</u> , <u>Chinese vegetable</u> , <u>Mustard leaf</u> , <u>Shepherd's purse</u> , <u>Chicory</u> (leaves), <u>Endive</u> , <u>Parsley</u> , <u>Pumpkin young leaves</u> , <u>Shinsuncho</u> , <u>Korean wasabi</u> (leaves), <u>Amaranth</u> , <u>Toothed ikeris</u> , <u>Burdock Leaves</u> , <u>Gyeojachae</u> , <u>New green</u> , <u>Dachungchae</u> , <u>Dong quai leaf</u> , <u>Foremost mugwort</u> , <u>False Solomon's Seal leaf</u> , <u>Mulberry Leaves</u> , <u>Rape</u> , <u>Chunchae</u> , <u>Sonchus-leaf</u> , <u>Indian lettuce</u> , <u>Dandelion</u> , <u>Beach silvertop</u> , <u>Gondre</u> , <u>Burdock Leave</u> , <u>Uleungdo aster</u> , <u>Ussuri thistle</u> , <u>Alpine leek</u> , <u>Vitamin</u> , <u>Common day lily</u> , <u>East Asian wildparsley</u> , <u>Sedum</u> , <u>Beat leaves</u> etc

Type	Group	Representative commodity	Commodity
Vegetables	Stalk and stem vegetables	Commodities of two or more	<u>Welsh onion</u> , <u>Chinese chives</u> , <u>Water celery</u> , sweet potato stem, Taro stem, Bracken, <u>Asparagus</u> , <u>Celery</u> , Bamboo shoot, Kohlrabi, Dureup young shoot, Wild garlic, Royal fern, Green garlic(including garlic flower stalk), Chinese onion(rakkyo), Saltmarsh sand spurry, Leek, Allium hookeri etc
	Root and tuber vegetables	Commodities of three or more	<u>Radish(root)</u> , <u>Onion</u> , <u>Garlic</u> , <u>Carrot</u> , <u>Ginger</u> , <u>Lotus root</u> , <u>Burdock</u> , <u>Doragi(Balloon flower)</u> , <u>Deodeok</u> , <u>Beet</u> , <u>Sugar beet</u> , <u>Turnip</u> , <u>Parsnip</u> , <u>Yacon</u> , <u>Korean wasabi(root)</u> , <u>Chicory(root)</u> , <u>Ginseng</u> (including wood cultivated ginseng), <u>Korean solomon's seal(root)</u> etc
	Fruiting vegetables, Cucurbits	Commodities of three or more	<u>Cucumber</u> , <u>Squash</u> , <u>Korean melon</u> , <u>Watermelon</u> , <u>Melon</u> , <u>Zucchini(winter squash)</u> etc
	Fruiting vegetables other than Cucurbits	Commodities of three or more	<u>Tomato</u> (including <u>cherry tomato</u> ), <u>Green &amp; Red pepper(fresh)</u> , <u>Sweet pepper</u> (including <u>paprika</u> ), <u>Eggplant</u> , <u>Okra</u> , <u>Unripe bean</u> etc

Type	Group	Representative commodity	Commodity
Mush -rooms	-	Commodities of two or more	<u>Oyster mushroom</u> , <u>Pine mushroom</u> , <u>Shiitake mushroom</u> , <u>Cultivated mushroom</u> , <u>Cauliflower coral</u> , <u>Enoke</u> , <u>Hirmeola</u> , <u>Reishi mushroom</u> , <u>King oyster mushroom</u> , <u>Black hoof mushroom</u> , <u>Parasol mushroom</u> , <u>Nameko</u> , <u>Cantharellus luteocomus</u> , <u>Almond mushroom</u> , <u>Stone ear mushroom</u> etc
Herbs and Spices	Spices	Spices : each commodity of one or more (seeds, fruit, root, leaf (bark, branch, bud) etc)	<u>Mustard(Seeds)</u> , <u>Coriander(Seeds)</u> , <u>Nutmeg(Seeds)</u> , <u>Fennel(Seeds)</u> , <u>Cumin(Seeds)</u> , <u>Cardamom(Seeds)</u> , <u>Vanilla beans(Seeds)</u> , <u>Anise(Seeds)</u> , <u>Celery (Seeds)</u> etc <u>Pepper</u> , <u>Sichuan(Fruits)</u> , <u>Pepper(Fruits)</u> , <u>Pepper, Long(Fruits)</u> , <u>Caper(Fruits)</u> etc
		Subgroup of spices : each commodity of two or more (seeds, fruit, root, leaf)	<u>Coriander(Roots)</u> , <u>Turmeric(Roots)</u> etc <u>Cinnamon(branch)</u> , <u>Cinnamon(bark)</u> , <u>Cloves(Flower buds)</u> , <u>Saffron(Stigma)</u> , <u>Sweet Cicely</u> etc
	Herbs	Commodities of two or more	<u>Rosemary</u> , <u>Basil</u> , <u>Coriander leaves</u> , <u>Laurel leaves</u> , <u>Sichuan pepper sprouts</u> , <u>Peppermint</u> , <u>Fennel</u> , <u>Mints</u> , <u>Lemongrass</u> , <u>Stevia(leaves)</u> , <u>dill(leaves)</u> , <u>Oregano</u> , <u>Thyme</u> , <u>Lavender</u> , <u>Calendula(flowers)</u> , <u>Hyssop</u> , <u>anise</u> etc
Tea leaves	-	Tea leaves	<u>Tea leaves</u>
Hops	-	Hops	<u>Hops</u>

\* mints: *Mentha* spp.



# List of Exempted Pesticides



No	Active ingredient
1	(1-Methylcyclopropene)
2	(Machine oil)
3	(Decylalcohol)
4	( <i>Monacrosporium thaumasiun</i> KBC3017)
5	( <i>Bacillus subtilis</i> DBB1501)
6	( <i>Bacillus subtilis</i> CJ-9)
7	( <i>Bacillus subtilis</i> M 27)
8	( <i>Bacillus subtilis</i> MBI600)
9	( <i>Bacillus subtilis</i> Y1336)
10	( <i>Bacillus subtilis</i> EW42-1)
11	( <i>Bacillus subtilis</i> JKK238)
12	( <i>Bacillus subtilis</i> GB0365)
13	( <i>Bacillus subtilis</i> KB401)
14	( <i>Bacillus subtilis</i> KBC1010)
15	( <i>Bacillus subtilis</i> QST713)
16	( <i>Bacillus amyloliquefaciens</i> KBC1121)
17	( <i>Bacillus pumilus</i> QST2808)
18	(Bordeaux mixture)
19	( <i>Beauveria bassiana</i> GHA)
20	( <i>Beauveria bassiana</i> TBI-1)
21	( <i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> )
22	( <i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> NT0423)
23	( <i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> GB413)
24	( <i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> )
25	( <i>Bacillus thuringiensis</i> var. <i>kurstaki</i> )
26	(Calcium polysulfide, lime sulfur)
27	( <i>Streptomyces goshikiensis</i> WYE324)
28	( <i>Streptomyces colombiensis</i> WYE20)
29	(Spreader sticker)
30	(Polyethylene Methyl Siloxane)

No	Active ingredient
31	(IBA, 4-indol-3-ylbutyric acid)
32	(IAA, Indol-3-ylacetic acid)
33	(Sodium salt of alkylsulfonated alkylate)
34	(Alkyl aryl polyethoxylate)
35	( <i>Ampelomyces quisqualis</i> AQ94013)
36	(Oxyethylene methyl siloxane)
37	(Gibberellin A <sub>3</sub> , Gibberellin A <sub>4+7</sub> )
38	(Calcium carbonate)
39	(Copper sulfate basic)
40	(Copper sulfate tribasic)
41	(Copper oxychloride)
42	(Copper hydroxide)
43	(Trichoderma harzianum YC 459)
44	( <i>Paenibacillus polymyxa</i> AC-1)
45	( <i>Paecilomyces fumosoroseus</i> DBB-2032)
46	(Polynaphthyl methane sulfonic acid dialkyl dimethyl ammonium(PMSAADA))
47	(Polyether modified polysiloxane)
48	(Polyoxyethylene methyl Polysiloxane)
49	(Polyoxyethylene alkylarylether)
50	(Polyoxyethylene fatty acid ester(PFAE))
51	(Sulfur)
52	(polynaphthyl methane sulfonic + polyoxyethylene fatty acid ester)
53	(Sodium ligno sulfonate)
54	( <i>Simplicillium lamellicola</i> BCP)
55	( <i>Trichoderma atroviride</i> SKT-1)
56	(Paraffin, Paraffinic oil)
57	(Pelargonic acid)
58	(Ethyl formate)
59	(Tea tree oil)
60	(Copper sulfate pentahydrate)
61	(Polyoxin D)



# Want to know The status of IT application?



Step 1. Access the homepage of Food Safety : Korea([www.foodsafetykorea.go.kr](http://www.foodsafetykorea.go.kr)) and click [Food Specialized Information Service]

The screenshot shows the homepage of the Food Safety Korea website. At the top, there are several navigation links: 통합민원상담서비스, 데이터활용서비스, 우리회사 안전관리서비스, 기업회원가입, 개인회원가입, and 로그인. Below the header, the main title is '식품안전정보 포털 식품안전나라'. On the right side, there are buttons for '메뉴 한눈에 보기' and '+'. The main content area features several promotional boxes:

- 이런식품 드시지 마세요**: An orange box with a fork and knife crossed out, indicating foods to avoid.
- 불량식품 신고하시겠습니까?**: A blue box with the number 1399 and a hand icon, for reporting food quality issues.
- 업체, 제품 정보가 궁금하세요?**: A blue box showing a hand holding a smartphone displaying a product information page.
- 우리동네 음식점은 안전할까?**: A green box with icons of a restaurant, fork, spoon, and knife, asking if local restaurants are safe.
- 우리아이는 학교에서 무엇을 먹을까?**: An orange box with icons of a school building, burger, and glass, asking what children eat at school.
- 우리회사 안전관리서비스**: A green box with a lock and a pen icon, for company safety management services. This box is highlighted with a red border and a red arrow points to it from the left.
- 전문정보관**: A dark blue box containing links to various specialized databases: 식품안전관리체계, 식품안전정보맵, 식품행정업무안내, 전문DB관, and 용어사전.



## Step 2. Click [Pesticides and Veterinary Drugs Information]



통합민원상담서비스 | 데이터활용서비스 | 우리회사 안전관리서비스 | 기업회원가입 | 개인회원가입 | 로그인

식품 안전 정보 포털

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Click

- 업체제품검색
  - 업체 검색
  - 제품 검색
  - HACCP 인증업체 현황
  - 수입식품 검색
  - 이력추적정보조회
  - 건강기능식품 조회
  - 지역별 위생정보 공개현황
  - 우리동네식품안전정보
- 용어사전
- 식품원료
  - 식품원료의 이해
  - 식품원료의 관리
  - 식품원료별 기준
  - 생활속의 식품원료
  - 식품원료한시적인정
  - 식품원료목록
- 수출식품지원정보
  - CODEX 정보
  - CODEX소개
  - 분과위원회활동모니터링
  - CODEX규격및지침
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식품의유통기한설정

- 법령정보
  - 식품안전정보맵
- 기준규격정보
  - 식품기준규격
  - 식품첨가물기준규격
  - 기구및용기포장 기준규격
  - 살균소독제 기준규격
- 정책공유창

표시기준정보

• 잔류물질정보

- 유해물질정보
- 전문DB관
- 어린이급식지원현황
- 푸드트럭

신고하시겠습니까?

1399

수자원 관리부

온라인 민원

전문DB관

용어사전

Page 1



### Step 3. Click [Import tolerance application status] on the “Pesticides”



Email: hslee3@korea.kr Hotline: (043) 719-4206 / 시스템관련 오류문의: (043) 719-1621 로그인 사이트맵

## 식품의약품안전처 잔류물질정보(Pesticides and Veterinary Drugs Information)

농약(PESTICIDES) 동물용의약품(VETERINARY DRUGS) 자료실(DOWNLOADS) 관련사이트(RELATED SITES)

수입식품 중 농약잔류허용기준 설정 진행 사항 Import tolerance application status

Fungicide Plant growth regulator  
Levamisole HCl Levamisole HCl Novobiocin  
Vetronextromycin Macrolide Insecticide Moxidectin  
Gentamicin Clavulanic acid  
Cefotaxime Ofloxacin Florfenicol  
Kanamycin Cefadroxil  
Pirimycin

농약분석정보 Pesticide Analytical Manual

간류농약이란? 간류농약 안전한지? 간류농약 효과적 제거법 간류농약 안전관리 간류농약줄이기 동물용의약품이란? 식품에 남아있는 등을용 의약품 우리몸에 위험할까요? 동물용의약품 안전관리

농약자료 동물용의약품자료 + more

- 2016년「식품의 농약 잔류허용기준」책자 2016.11.11
- [논문] LC-MS/MS를 이용한 축산물 중 S··· 2016.05.26
- [논문] GC-ECD를 이용한 농산물 중 Ipfe··· 2016.05.26
- [논문] LC-MS/MS를 이용한 농산물 중 식··· 2016.05.26
- [논문] LC-MS/MS를 이용한 축산물 중 P··· 2016.05.26

오늘 방문자 수 123

전체 방문자 수 596,386

Click



## Step 4. Check the “Import tolerance application status”



Email: hslee3@korea.kr

Hotline: (043) 719-4206 / 시스템관련 오류문의: (043) 719-1621



로그인

사이트맵



식품의약품안전처

### 잔류물질정보(Pesticides and Veterinary Drugs Information)

농약(PESTICIDES) ▾

동물용의약품(VETERINARY DRUGS) ▾

자료실(DOWNLOADS) ▾

관련사이트(RELATED SITES) ▾

농약(Pesticides)

잔류화학물질의 올바른 이해가 여러분의 식탁을 풍요롭게 합니다  
The correct understanding of the residual chemicals to enrich your table



> 농약(Pesticides)

> 수입식품 중 농약잔류허용기준 설정 진행 사항 Import tolerance application status

잔류허용기준 MRLs in Pesticide

농약정보 Pesticide Information

농약표준 Pesticide Standards >

수입식품 중 농약잔류허용기준 설정  
진행 사항 Import tolerance  
application status

농약분석정보 Pesticide Analytical  
Manual



잔류농약 안전관리



동물용의약품 안전관리



농약... 이젠 안심하세요  
동영상 다운로드

수입식품 중 농약잔류허용기준 설정 진행 사항(Import tolerance application status)



신청일을 선택



농약명을 입력하세요.



대상식품을 입력하세요.

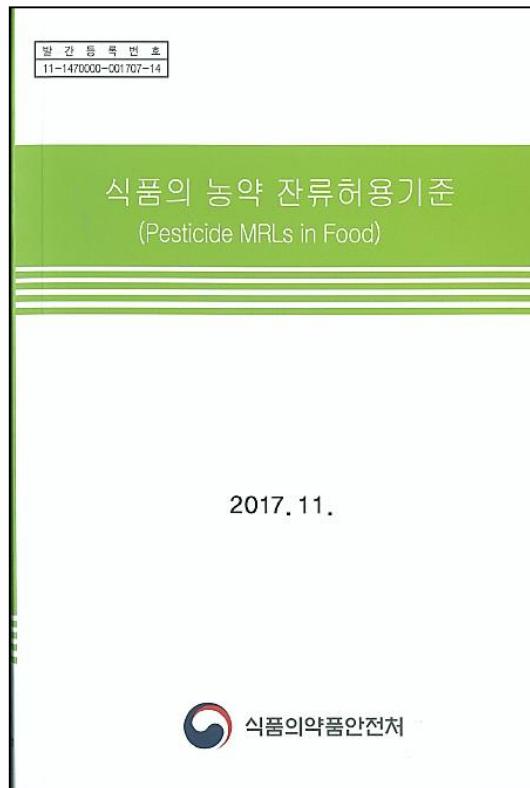


신청회사를 입력하세요.

검색

총 276건, 현재페이지: 1/19

No.	농약명 Pesticide	대상식품 Commodity	신청일 Application date	검토완료예정일 Complete date	신청회사 Application company	비고 Remark
1	Trifloxystrobin	Potato	2016-05-25	2017-10-27	Bayer	
2	Trifloxystrobin	Oat	2016-05-25	2017-10-27	Bayer	
3	Propargite	Tree nuts (Walnut)	2016-04-19	2017-09-21	Arista	0.1 mg/kg (견과류), 제2016-154호(16.12.29) 고시
4	Buprofezin	Tree nuts (Pistachio)	2016-05-27	2017-09-27	Exponent International Limited	0.05 mg/kg(견과류), 제2016-154호(16.12.29)고시
5	Cyantraniliprole	Tree nuts (Walnut, Pistachio)	2016-04-01	2017-09-11	Dupont	0.04 mg/kg (견과류), 제2016-154호(16.12.29) 고시
6	Tebuconazole	Melon	2016-05-11	2017-10-25	Bayer	
7	Tebuconazole	Plum	2016-05-11	2017-10-25	Bayer	
8	Tebuconazole	Peach	2016-05-11	2017-10-25	Bayer	
9	Tebuconazole	Cherry	2016-05-11	2017-10-25	Bayer	
10	Tebuconazole	Raisin	2016-05-11	2017-10-25	Bayer	
11	Pyraclostrobin	Hop	2015-12-30	2017-03-17	BASF	15 mg/kg, 제2016-153호(16.12.29)고시



[www.foodsafetykorea.go.kr/residue/main.do](http://www.foodsafetykorea.go.kr/residue/main.do)

2018. 5. 30



THANK YOU



식품의약품안전처