## Results of official testing of specified feed additives (FY 2009)

Specified feed additives mean the feed additives for which the standards are set in accordance with the provision of Article 3, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Law No. 35 issued April 11, 1953; hereinafter referred to as "Feed Safety Law") and which are the antibacterial preparations specified in Article 2, item 2 of the Order for Enforcement of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Order No. 198 issued July 16, 1976). Only the specified feed additives with a certificate of passing the testing which the Food and Agricultural Materials Inspection Center (hereinafter referred to as "FAMIC") conducts in accordance with the provisions of Article 5, paragraph 1 of the Feed Safety Law may be distributed; provided, however, that those manufactured by the manufacturers of specified feed additives registered under Article 7, paragraph 1 of the Feed Safety Law (hereinafter referred to as "registered manufacturers of specified feed additives") on which the indication referred to in Article 16 paragraph 1 of the same Law is placed and those manufactured by the foreign manufacturers of specified feed additives registered under Article 21 paragraph 1 which the indication referred to the paragraph 2 of the same Article is placed on may be distributed.

The following report is the summary of the results of official testing of the specified feed additives, which are applied for at FAMIC in FY 2009.

### 1. Names of applicants and others

Table 1 shows the names of applicants and others concerning the official testing of the specified feed additives in FY 2009.

Seven business entities applied the official testing of specified feed additives. As for their manufacturing forms and others, four of the seven import raw materials for manufacturing or preparations by themselves or purchase them from other companies to manufacture preparations, and the other three import preparations and market them only. There was no business entity which manufactures from raw materials for manufacturing to preparations by itself.

Eleven antibiotic preparations (12 in the previous FY) were applied as specified feed additives for a total of 24 brands (24 in the previous FY), which means the number of the types of antibiotic preparations decreased. Of them, the types and brands of the antibiotic preparations whose raw materials for manufacturing or preparation are dependent on foreign sources was 10 (11 in the previous FY) and 22 (21 in the previous FY), respectively.

Zinc bacitracin (preparation) was imported from Norway and China, and colistin sulfate (raw material for manufacturing) from China, alkyltrimethylammonium calcium oxytetracycline (raw material for manufacturing) from China, chlortetracycline (preparation) from Singapore, tylosin phosphate (preparation) from the USA, salinomycin sodium (raw material for manufacturing) from China, Bulgaria and Brazil, narasin (preparation) from the USA, monensin sodium (raw material for manufacturing) from the USA and China, lasalocid sodium (raw material for manufacturing) from the USA, and avilamycin (preparation) from the UK. The number of the

import source countries was seven (7 in the previous FY).

#### 2. Number of the passed cases of the specified feed additives by type and others

Table 2 shows the results of the number of the passed cases by type, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives in FYs 2007, 2008, and 2009.

In FY 2009, 215 cases and 960 tons were passed, and the quantity converted from the actual quantity into potency was 108 tons (potency). All of the passed cases, the passed quantity, and the quantity converted from the actual quantity decreased compared with the previous fiscal year, 62.0%, 64.2%, and 64.1%, respectively.

The percentage of the antibiotic preparations in the total passed quantity by type was 26.6%, which was the highest one, for salinomycin sodium (24.4% in the previous FY), followed in descending order by 21.3% for colistin sulfate (13.3% in the previous FY), 20.5% for narasin (14.9% in the previous FY), 11.2% for avilamycin (13.6% in the previous FY), and 8.3% for nosiheptide (5.9% in the previous FY). As for the percentage of them in the total of which the quantity converted from the actual quantity into potency, the highest was 23.6% for salinomycin sodiums (21.6% in the previous FY), followed in descending order by 18.9% for colistin sulfate (11.8% in the previous FY), 18.1% for narasin (13.2% in the previous FY), 17.9% for avilamycin (12.1% in the previous FY), and 5.6% for monensin sodium (19.2% in the previous FY).

Both the passed quantity and the quantity converted from the actual quantity of colistin sulfate, tylosin phosphate and alkyltrimethylammonium calcium oxytetracycline increased compared with FY 2008, while salinomycin sodium, narasin, avilamycin and nosiheptide decreased.

The following substances were not applied in FY 2009: virginiamycin, which has not been applied since FY 2008; destomycin A, flavophospholipol and semduramicin sodium, which have not been applied since FY 2007; efrotomycin and sedecamycin, which have not been applied since FY 2005; and bicozamycin, which have not been applied since FY 1999. In addition, enramycin was not applied in FY 2009, but has been manufactured by the registered manufacturers of specified feed additives referred to in Article 7, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds.

# 3. The number of the testing-passed cases and others of the specified feed additives by refining grade and feed grade and others

The specified feed additives are classified as the refining grade or the feed grade according to the difference of the post-cultivation manufacturing methods. The former is derived from the high purity raw materials for manufacturing in which the only active constituent of an antibiotic is extracted from a culture solution and then refined, while the latter is derived from the low purity raw materials for manufacturing in which a culture solution containing a medium component and a fungus compound used for manufacturing is dried.

Table 3 shows the number of the testing-passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives by refining grade

and feed grade in FY 2009.

Compared between percentages of the refining grade and the feed grade based on the quantity converted from the actual quantity into potency, the feed grade accounted for 66.0 % of the total (55.6 % in the previous FY).

Both the refining grade and the feed grade are set for nosiheptide, colistin sulfate, and salinomycin sodium. In FY 2009, only the refining grade of colistin sulfate, only the feed grade of nosiheptide and the both grades of salinomycin sodium were subjected to the testing.

As for salinomycin sodium, the feed grade preparations are approximately 13 times as much as the refining grade preparations when the quantities converted from the actual quantity into potency are compared.

### 4. Changes in the passed quantity and others of antibiotic preparations by category

Figures 1 and 2 show the changes in the testing-passed quantity and the quantity converted from the actual quantity into potency by category of the specified feed additives over the last decade, from 2000 to 2009, respectively.

The passed quantity of antibiotic preparations by category was on a declining trend from FY 2000 to FY 2002, since then has repeated increase and decrease, and in FY 2009 was the lowest over the past decade. The quantity converted from the actual quantity into potency has also repeated increase and decrease since FY 2000, and was the lowest over the past decade in FY 2009, and the rate of decrease was the highest over the past decade (64% over the previous year). As for the quantity converted from the actual quantity into potency of antibiotic preparations by category, polyether antibiotics has changed since FY 2000 at a rate of more than half of the total, and in FY 2009 accounted for 49.0% of the total (63.3% in the previous FY), and polypeptide antibiotics accounted for 26.0% (21.0% in the previous FY).

# 5. Number of the passed cases and others of specified feed additives by the jurisdiction area

Table 4 shows the number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency within the jurisdiction areas of the FAMIC headquarters and respective regional centers in FY 2009.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency in FY 2009 were highest within the jurisdiction area of the Kobe center, followed by the jurisdiction areas of the Fukuoka center, and the headquarters.

The number of the passed cases, the passed quantity and the quantity converted from the actual quantity into potency increased within the jurisdiction areas of the headquarters and the Fukuoka center, but decreased within the jurisdiction of the Kobe center, compared with the previous fiscal year.

In addition, within the jurisdiction areas of the Sapporo, Sendai, and Nagoya centers, there have been no reports of testing since FY 2005, FY 1995, and FY 2007, respectively. All of them also had no reports in FY 2009.

#### 6. Quantity manufactured by the registered manufacturers of specified feed additives

In FY 2007, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. was registered as a place of business as a manufacturer of specified feed additives concerning semduramicin sodium, and one brand has been manufactured. In FY 2009, Tatsuno Factory, Scientific Feed Laboratory Co., Ltd was registered as a place of business as a manufacturer of specified feed additives concerning salinomycin sodium, monensin sodium, lasalocid sodium, enramycin and colistin sulfate and has manufactured them. The number of brands manufactured by these plants, the manufactured quantity and the quantity converted from the actual quantity into potency in FY 2009 are shown in Table 5.

#### 7. Summary

The results of the official testing of the specified feed additives and the manufacturing by the registered manufacturers of specified feed additives in FY 2009 were as follows.

- (1) Twenty four brands of 11 specified feed additives were applied for the official testing of specified feed additives by 7 business entities.
- (2) The manufacturing of raw materials or preparations for 22 brands of 10 specified feed additives was dependent on foreign sources.
- (3) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency were 215 cases, 960 tons, and 108 tons (potency), respectively. All of them decreased compared to the previous fiscal year.
- (4) The antibiotic preparations with the highest most passed quantity were salinomycin sodium (26.6%), followed by colistin sulfate, narasin, avilamycin, and nosiheptide in descending order.
- (5) The antibiotic preparation with the highest quantity converted from the actual quantity into potency was salinomycin sodium (23.6%), followed by colistin sulfate, narasin, avilamycin, and monensin sodium in descending order.
- (6) Compared between percentages of the refining grade and the feed grade on the testing-passed quantity converted from the actual quantity into potency of the specified feed additives, the feed grade accounted for 66.0 % of the total.
- (7) The changes in the quantity converted from the actual quantity into potency over the last decade show that it has repeated increase and decrease since FY 2000, and in FY 2009 it was the lowest and the rate of decrease was the highest over the last decade (64% over the previous year).
- (8) The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency by jurisdiction area were highest for the Kobe center.
- (9) Semduramicin sodium, salinomycin sodium, monensin sodium, lasalocid sodium, enramycin and colistin sulfate were manufactured by the registered manufacturers of specified feed additives.

Contact office of FAMIC	Name of applicant	Place of manufacturing	Type of the specified feed additives	Feed grade	Content potency (mg (potency)/g)	Remarks
		*		0	100	4,200 unit/g
	Kaken Pharmaceutical Co., Ltd.		Zinc bacitracin	0	150	6,300 unit/g
				0	100	
-	Nichiku Yakuhin Kogyo Corporation	Kanagawa	Sailhomycin sodium		100	
Headquarters			Monensin sodium		200	
				0	100	
	Japan Nutriion Co., Lta.	IDARAKI	Saimornycin sodium	0	100	
	Fumakilla Totalsystem Ltd.	*	Chlortetracycline	0	100	
				0	100	
			Saiinomycin sodium	0	100	
					200	
			Monensin sodium		200	
	scientific Feed Laboratory Co., Ltd.	Hyogo			150	
			Lasalocid sodium		150	
Kobe			Colistin sulfate		100	
			Tylosin phosphate		275	
				0	100	
		*	Avliamycin	0	200	
	Ell LIIIy Japan K. K.		Narasin	0	100	
			Tylosin phosphate		275	
	Scientific Feed Laboratory Co., Ltd.	Miyazaki	Colistin sulfate		100	
elenelT			Alky ftr imethy lammonium calcium oxy tetracy cline		400	
L UKUOKa	Kohkin Chemical Co., Ltd.	Kagoshima	Salinomycin sodium	0	100	
			Nosiheptide	0	40	
Total	7 husiness entities	8 nlaces			24 hrands	

Table 2: Number of the testing-passed cases, passed quantity, and quantity converted from the actual quantity into potency

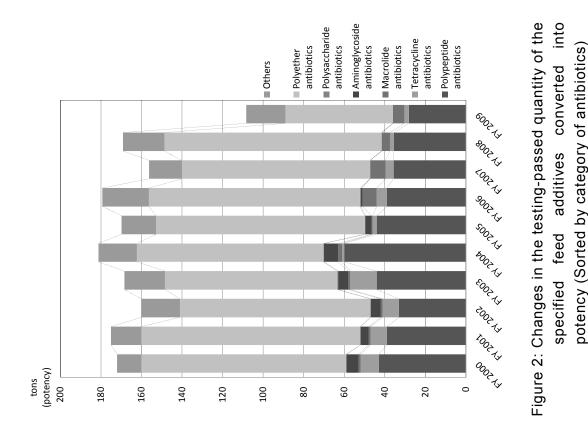
			(Sorted by		the type of the	of the		oiotics, F	Ys 20	antibiotics, FYs 2007 to 2009	(60					
				2007					2008					2009		
	T.ma of the charified		pessed		Quantity			possed		Quantity			Docod		Quantity	
Category	feed additives	Passed cases	quantity	Compos ition	converted into potency	Compos ition	Passed cases	quantity	Compos ition	converted into potency	Compos ition	Passed cases	quantity	Compos ition	converted into potency	Compos ition
				ratio		ratio			ratio		ratio			ratio		ratio
			kg	(%)	kg(potency)	(%)		kg	(%)	kg(potency)	(%)		kg	(%)	kg(potency)	(%)
	Zinc bacitracin	14	54,600.0	4.0	6,850.0	4.4	13	56,475.0	3.8	6,921.3	4.1	11	38,325.0	4.0	4,423.8	4.1
	Enramycin	18	64,300.0	4.7	5,144.0	3.3	15	64,360.0	4.3	5,148.8	3.0	0	0.0	0.0	0.0	0.0
Polypeptide	<b>Nos iheptide</b>	18	72,000.0	5.3	2,880.0	1.8	22	87,920.0	5.9	3,516.8	2.1	20	80,000.0	8.3	3,200.0	3.0
antibiotics	Virginiamycin	-	1,000.0	0.1	500.0	0.3	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
	Colistin sulfate	53	206,080.0	15.1	20,283.2	13.0	54	199,140.0	13.3	19,914.0	11.8	53	204,940.0	21.3	20,494.0	18.9
	Subtotal	104	397,980.0	29.2	35,657.2	22.8	104	407,895.0	27.3	35,500.9	21.0	84	323,265.0	33.7	28,117.8	26.0
Tetracycline	Alkyltrimethylammonium calcium oxytetracy cline	2	4,000.0	0.3	1,600.0	1.0	1	2,000.0	0.1	800.0	0.5	2	2,520.0	0.3	1,008.0	0.9
antibiotics	Chlortetracycline	9	24,000.0	1.8	2,400.0	1.5	e	12,000.0	0.8	1,200.0	0.7	e	12,000.0	1.2	1,200.0	1.1
	Subtotal	8	28,000.0	2.1	4,000.0	2.6	4	14,000.0	0.0	2,000.0	1.2	5	14,520.0	1.5	2,208.0	2.0
Moorolido	Tylosin phosphate	9	27,648.0	2.0	7,603.3	4.9	3	14,822.0	1.0	4,076.1	2.4	4	20,477.0	2.1	5,631.2	5.2
indici oliue antibiotice	Sedecamycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
	Subtotal	9	27,648.0	2.0	7,603.3	4.9	3	14,822.0	1.0	4,076.1	2.4	4	20,477.0	2.1	5,631.2	5.2
Aminoglycoside	Destomycin A	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
antibiotics	Subtotal	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Polysaccharide	Flavophospholipol	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
antibiotics	Subtotal	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
	Salinomycin sodium	06	359,280.0	26.4	35,928.0	23.0	91	364,840.0	24.4	36,484.0	21.6	64	255,400.0	26.6	25,540.0	23.6
	Semduramicin sodium	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Polyether	Narasin	16	177,750.0	13.1	17,775.0	11.4	21	222,575.0	14.9	22,257.5	13.2	18	196,525.0	20.5	19,652.5	18.1
antibiotics	Monensin sodium	41	152,940.0	11.2	30,588.0	19.6	42	162,080.0	10.8	32,416.0	19.2	8	30,360.0	3.2	6,072.0	5.6
	Lasalocid sodium	14	56,560.0	4.2	8,484.0	5.4	27	106,300.0	7.1	15,945.0	9.4	e	11,780.0	1.2	1,767.0	1.6
	Subtotal	161	746,530.0	54.8	92,775.0	59.4	181	855,795.0	57.2	107,102.5	63.3	93	494,065.0	51.5	53,031.5	49.0
	Avilam ycin	44	161,725.0	11.9	16,172.5	10.4	55	204,000.0	13.6	20,400.0	12.1	29	107,950.0	11.2	19,347.5	17.9
0.045	Efrotomycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Olleis	Bicozamycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
	Subtotal	44	161,725.0	11.9	16, 172.5	10.4	55	204,000.0	13.6	20,400.0	12.1	29	107,950.0	11.2	19,347.5	17.9
L	Total	323	1,361,883.0	100.0	156,208.0	100.0	347	1,496,512.0	100.0	169,079.4	100.0	215	960,277.0	100.0	108,335.9	100.0
Ratio to the prev	Ratio to the previous fiscal year (%)	73.6	85.5		87.2		107.4	109.9		108.2		62.0	64.2		64.1	

Note: Quantity and others of the specified feed additives manufactured by the registered manufacturers are shown separately in Table 5.

Table 3: Number of the testing-passed cases, passed quantity, and quantity converted from the actual quantity into potency

	, ,	)	Refining grade	٩		Food arado	
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Category	Type of the specified feed additives	Passed cases	Passed quantity	Quantity convreted into potency	Passed cases	Passed quantity	Quantity convreted into potency
			kg	kg(potency)		kg	kg(potency)
	Zinc bacitracin				11	38,325.0	4,423.8
Dolymontido	Enramycin				-	-	-
r urypepride antihiotice	Nosiheptide	-	I		20	80,000.0	3,200.0
	Virginiamycin	-	-				
	Colistin sulfate	53	204,940.0	20,494.0	-	-	I
Tetracycline	A lkyltrimethylammonium calcium oxytetracycline	2	2,520.0	1,008.0			
	Chlortetracycline				3	12,000.0	1,200.0
Macrolide	Sedecamycin	-	I				
antibiotics	Tylosin phosphate	4	20,477.0	5,631.2			
Aminoglycoside antibiotics	Destomycin A						
Polysaccharide antibiotics	Flavophospholipol				I	I	ı
	Salinomycin sodium	9	18,640.0	1,864.0	59	236,760.0	23,676.0
Dobiothor	Semduramicin sodium	-	I				
Pulyeuler	Narasin				18	196,525.0	19,652.5
	Monensin sodium	8	30,360.0	6,072.0			
	Lasalocid sodium	3	11,780.0	1,767.0			
	Avilamycin				29	107,950.0	19,347.5
Others	Efrotomycin	-	-	-			
	Bicozamycin	1	-				
Tc	Total	<i>51</i>	288,717.0	36,836.2	140	671,560.0	71,499.8
Propor	Proportion (%)	34.9	30.1	34.0	65.1	6.69	66.0

(Sorted by the grade of the preparation, FY 2009)



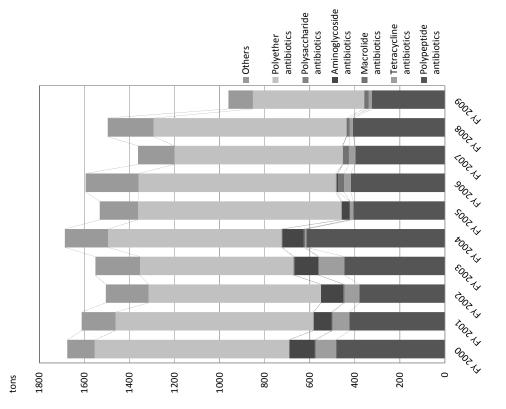


Figure 1: Changes in the testing-passed quantity of the specified feed additives (Sorted by category of antibiotics)

Table 4: Number of the testing-passed cases, passed quantity, and quantity converted into potency

Contact office of	Passed	Passed	Quantity converted
	cases	quantity	into potency
		kg	kg(potency)
заеристирсен	43	165,305	17,826
i icauquai ici s	(30)	(123,635)	(14,353)
Sapporo	(-)  -	(-)	-
Sendai	(-) -	(-)	- -
Nagoya	(-) -	(-)  -	(-)
Kobe	111 (262)	556,752 (1,160,397)	70,732 (138,153)
Fukuoka	61 (55)	238,220 (212,480)	19,778 (16,573)
Total	215	960,277 (1 496 512)	108,336 769 079
	(110)	1,1000121	(100,00)

(Sorted by the jurisdiction area of FAMIC, FY 2009)

Data of the previous year are in parentheses.

(FY 2009)	
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Table	

	2009	Manufactured Quantity converted	quantity into potency	kg kg(potency)	52,300 4,184	8,220 822	60,520 5,006	156,460 15,646	20,000 1,000	122,660 24,532	72,420 10,863	371,540 52,041	432,060 57,047	5,401 14,262	(Hearing from each registered manufacturer of specified feed additives)
		Type of the specified feed	additives		Enramycin	Colistin sulfate (Refining grade)	Subtotal	Salinomycin sodium (Feed grade)	Semduramicin sodium	Monensin sodium	Lasalocid sodium	Subtotal	Total	Ratio to the previous fiscal year (%)	(Hearing from each registered
יומומסומו סמ לממוויו			Caleguly			Polypeptide antibiotics			Polyether	antibiotics				Ratio to the	

## Results of official testing of specified feed additives (FY 2010)

Specified feed additives mean the feed additives for which the standards are set in accordance with the provision of Article 3, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Law No. 35 issued April 11, 1953; hereinafter referred to as "Feed Safety Law") and which are the antibacterial preparations specified in Article 2, item 2 of the Order for Enforcement of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Order No. 198 issued July 16, 1976). Only the specified feed additives with a certificate of passing the testing which the Food and Agricultural Materials Inspection Center (hereinafter referred to as "FAMIC") conducts in accordance with the provisions of Article 5, paragraph 1 of the Feed Safety Law may be distributed; provided, however, that those manufactured by the manufacturers of specified feed additives registered under Article 7, paragraph 1 of the Feed Safety Law (hereinafter referred to as "registered manufacturers of specified feed additives") on which the indication referred to in Article 16 paragraph 1 of the same Law is placed and those manufactured by the foreign manufacturers of specified feed additives registered under Article 21 paragraph 1 which the indication referred to the paragraph 2 of the same Article is placed on may be distributed.

The following report is the summary of the results of official testing of the specified feed additives, which are applied for at FAMIC in FY 2010. The quantity and others of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2010 are also reported.

### 1. Names of applicants and others

Table 1 shows the names of applicants and others concerning the official testing of the specified feed additives in FY 2010.

Seven business entities applied the official testing of specified feed additives. As for their manufacturing forms and others, four of the seven import raw materials for manufacturing or preparations by themselves or purchase them from other companies to manufacture preparations, and the other three import preparations and market them only. There was no business entity which manufactures from raw materials for manufacturing to preparations by itself.

Ten antibiotic preparations (11 in the previous FY) were applied as specified feed additives for a total of 16 brands (24 in the previous FY), which means the numbers of the types and brands of antibiotic preparations decreased. Of them, the types and brands of the antibiotic preparations whose raw materials for manufacturing or preparations are dependent on foreign sources were 9 (11 in the previous FY) and 13 (21 in the previous FY), respectively.

Zinc bacitracin (preparation), monensin sodium (raw material for manufacturing), colistin sulfate (raw material for manufacturing), and alkyltrimethylammonium calcium oxytetracycline (raw material for manufacturing) were imported from China, and salinomycin sodium (raw material for manufacturing) from China, Bulgaria and Brazil, chlortetracycline (preparation) from Singapore, tylosin phosphate (preparation) and narasin (preparation) from the USA, and avilamycin

(preparation) from the UK. The number of the import source countries was 6 (7 in the previous FY).

### 2. Number of the passed cases of the specified feed additives by type and others

Table 2 shows the results of the number of the passed cases by type, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives in FYs 2008, 2009, and 2010.

There were no antibiotic preparations which did not pass in the testing in 2010. In FY 2010, 194 cases and 925 tons were passed, and the quantity converted from the actual quantity into potency was 104 tons (potency). All of the passed cases, the passed quantity, and the converted quantity decreased compared with the previous fiscal year, 90.2%, 96.3%, and 95.7%, respectively.

The percentage of the antibiotic preparations in the total passed quantity by type was 28.4%, which was the highest one, for narasin (20.5% in the previous FY), followed in descending order by 23.8% for colistin sulfate (21.3% in the previous FY), 16.7% for salinomycin sodium (26.6% in the previous FY), 10.8% for avilamycin (11.2% in the previous FY), and 9.6% for nosiheptide (8.3% in the previous FY). As for the percentage of them in the total of which the quantity converted from the actual quantity into potency, the highest was 25.3% for narasin (18.1% in the previous FY), followed in descending order by 21.3% for colistin sulfate (18.9% in the previous FY), 19.3% for avilamycin (17.9% in the previous FY), 14.9% for salinomycin sodium (23.6% in the previous FY), and 5.9% for zinc bacitracin (4.1% in the previous FY).

Both the passed quantity and the converted quantity of zinc bacitracin, narasin, nosiheptide, colistin sulfate and tylosin phosphate increased compared with those in FY 2009, while both of alkyltrimethylammonium calcium oxytetracycline, salinomycin sodium and monensin sodium decreased.

Virginiamycin since FY 2008, efrotomycin and sedecamycin since FY 2005, and bicozamycin since FY 1999 have not been subjected to the testing, all of which were not also subjected to in FY 2010.

Enramycin, semduramicin sodium and lasalocid sodium were not subjected to the testing, but were manufactured by the registered manufacturers of specified feed additives.

Destomycin A has not been applied since FY 2007 and its designation as a feed additive was revoked by the Notification No. 270 of February 4, 2010 of the Ministry of Agriculture, Forestry and Fisheries.

# 3. The number of the testing-passed cases and others of the specified feed additives by refining grade and feed grade

The specified feed additives are classified as the refining grade or the feed grade according to the difference of the post-cultivation manufacturing methods. The former is derived from the high purity raw materials for manufacturing in which the only active constituent of an antibiotic is extracted from a culture solution and then refined, while the latter is derived from the low purity raw materials for manufacturing in which a culture solution containing a medium component and a

fungus compound used for manufacturing is dried.

Table 3 shows the number of the testing-passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives by refining grade and feed grade in FY 2010.

Compared between percentages of the refining grade and the feed grade based on the quantity converted from the actual quantity into potency, the feed grade accounted for 70.0 % of the total (66.0 % in the previous FY).

Both the refining grade and the feed grade are set for nosiheptide, colistin sulfate, and salinomycin sodium. In FY 2010, only the refining grade of colistin sulfate, only the feed grade of nosiheptide and salinomycin sodium were subjected to the testing.

#### 4. Changes in the passed quantity and others of antibiotic preparations by category

Figures 1 and 2 show the changes in the testing-passed quantity and the quantity converted from the actual quantity into potency by category of the specified feed additives over the last decade, from 2001 to 2010, respectively.

The passed quantity of antibiotic preparations by category was on a declining trend with repeating increase and decrease since FY 2004, which was the peak, significantly decreased from FY 2008 through FY 2009, and was the lowest in FY 2010, the lowest of the past 10 years. The quantity converted from the actual quantity into potency shows a similar trend, which significantly decreased from FY 2008 through FY 2009 (rate of decrease: 64% over the previous year), and was the lowest in FY 2010, the lowest of the past 10 years. In addition, one type and five types of specified feed additives have been manufactured by the registered manufacturers of specified feed additives since FY 2007 and FY 2009, respectively.

As for the quantity converted from the actual quantity into potency of antibiotic preparations by category, polyether antibiotics has changed since FY 2001 at a rate of more than half of the total and in FY 2010 accounted for 42.5% of the total (49.0% in the previous FY), and polypeptide antibiotics accounted for 30.6% (26.0% in the previous FY).

# 5. Number of the passed cases and others of specified feed additives by the jurisdiction area

Table 4 shows the number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency within the jurisdiction areas of the FAMIC headquarters and respective regional centers in FY 2010.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency in FY 2010 were highest within the jurisdiction area of the Kobe center, followed by the jurisdiction areas of the Fukuoka center, and the headquarters.

The number of the passed cases, the passed quantity and the quantity converted from the actual quantity into potency decreased within the jurisdiction area of each center, compared with the previous fiscal year.

In addition, within the jurisdiction areas of the Sapporo, Sendai, and Nagoya centers, there have

been no reports of testing since FY 2005, FY 1995, and FY 2007, respectively. All of them also had no reports in FY 2009.

#### 6. Quantity manufactured by the registered manufacturers of specified feed additives

In accordance with the provision of Article 7, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. was registered as a place of business as a manufacturer of specified feed additives concerning semduramicin sodium in FY 2007 and Tatsuno Factory, Scientific Feed Laboratory Co., Ltd., was registered as a place of business as a manufacturer of specified feed additives concerning salinomycin sodium, monensin sodium, lasalocid sodium, enramycin and colistin sulfate in FY 2009 and they have manufactured those preparations. The number of brands manufactured by these plants, the manufactured quantity and the quantity converted from the actual quantity into potency in FY 2009 are shown in Table 5.

As for the quantity manufactured by the registered manufacturers of specified feed additives, the total manufactured quantity and the total quantity converted from the actual quantity into potency were 704 tons (163% over the previous year) and 91 tons (155% over the previous year) respectively in FY 2010, and has continued to increase since FY 2008.

#### 7. Summary

The results of the official testing of the specified feed additives and the manufacturing by the registered manufacturers of specified feed additives in FY 2010 were as follows.

- (1) Sixteen brands of 10 specified feed additives were applied for the official testing of specified feed additives by 7 business entities.
- (2) The manufacturing of raw materials or preparations for 13 brands of 9 specified feed additives was dependent on foreign sources.
- (3) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency were 194 cases, 925 tons, and 104 tons (potency), respectively. All of them decreased compared to the previous fiscal year.
- (4) The antibiotic preparations with the highest most passed quantity were narasin (28.4%), followed by colistin sulfate, salinomycin sodium, avilamycin, and nosiheptide in descending order.
- (5) The antibiotic preparations with the highest quantity converted from the actual quantity into potency were narasin (25.3%), followed by colistin sulfate, avilamycin, salinomycin sodium, and zinc bacitracin in descending order.
- (6) Compared between percentages of the refining grade and the feed grade on the testing-passed quantity converted from the actual quantity into potency of the specified feed additives, the feed grade accounted for 70.0 % of the total.
- (7) The changes in the quantity converted from the actual quantity into potency of the passed preparations over the last decade show that they have decreased with repeating increase and decrease since FY 2004 and in FY 2009 the rate of decrease was the highest of the past 10

years (64% over the previous year), and then the quantity further decreased to be the lowest over the past decade in FY 2010.

- (8) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency by each regional center were the highest within the jurisdiction of the Kobe center.
- (9) Semduramicin sodium, salinomycin sodium, monensin sodium, lasalocid sodium, enramycin and colistin sulfate were manufactured by the registered manufacturers of specified feed additives. The total manufactured quantity and the total quantity converted from the actual quantity into potency have continued to increase since FY 2008.

Contact office of	Name of applicant	Place of	Type of the	Feed	Content potency	Remarks
FAMIC		manufacturing	specified feed additives	grade	(mg (potency)/g)	
		*		0	100	4,200 unit/g
	Naken Pharmaceulical Co., Ltd.	:	ZINC DACILIACIN	0	150	6,300 unit/g
			Salinomycin sodium	0	100	
neauquai lei s	NICITIKU TAKUTITI NOGYO COLPOTATION	Nallayawa	Monensin sodium		200	
	Japan Nutrition Co., Ltd.	Ibaraki	Salinomycin sodium	0	100	
	TNB Co., Ltd.	*	Chlortetracycline	0	100	
			Nosiheptide	0	40	
	Scientific Feed Laboratory Co., Ltd.	Hyogo	Colistin sulfate		100	
			Tylosin phosphate		275	
AUDA			Avilamycin	0	200	
	Eli Lilly Japan K. K.	*	Narasin	0	100	
			Tylosin phosphate		275	
	Scientific Feed Laboratory Co., Ltd.	Miyazaki	Colistin sulfate		100	
			Alky thrimethy lammonium calcium oxy tetracy cline		400	
r ukuoka	Kohkin Chemical Co., Ltd.	Kagoshima	Salinomycin sodium	0	100	
			Nosiheptide	0	40	
Total	7 business entities	8 places			16 brands	

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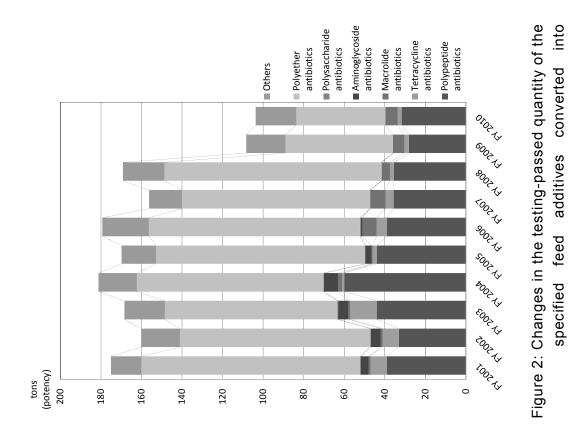
Table 2: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the type of the antibiotics, FYs 2008 to 2010)

Passed Passed cases	20 Com iti	ŏ		Compos ition ratio	Passed cases	Passed quantity	Z00 itic	0	Com itic rat	Passed cases	Passed quantity	20 Itic		Compos ition ratio
56,	kg ( 56,475.0 3	(%) kg(p 3.8	kg(potency) 6,921.3	(%) 4.1	11	kg 38,325.0	g (%) 4.0	<ul> <li>kg(potency)</li> <li>4,423.8</li> </ul>	y) (%) 8 4.1	10	52,260.0	1 (%) 5.6	kg(potency) 6,121.0	(%) 5.9
64,	64,360.0 4	4.3	5, 148.8	3.0	0	0.0	0.0	0.0 0.0	0.0		0.0	0.0	0.0	0.0
87,	87,920.0 5	5.9	3,516.8	2.1	20	80,000.0	8.3	3,200.0	0 3.0	26	88,360.0	9.6	3,534.4	3.4
	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0 0.0	0	0.0	0.0	0.0	0.0
199,	199,140.0 13	13.3 1	19,914.0	11.8	53	204,940.0	21.3	3 20,494.0	0 18.9	57	220,360.0	23.8	22,036.0	21.3
407,	407,895.0 27	27.3 3	35,500.9	21.0	84	323,265.0	33.7	7 28,117.8	8 26.0	93	360,980.0	39.0	31,691.4	30.6
Ъ,	2,000.0	0.1	800.0	0.5	2	2,520.0	0.3	3 1,008.0	0 0.9	-	2,000.0	0.2	800.0	0.8
12,	12,000.0 0	0.8	1,200.0	0.7	3	12,000.0	1.2	2 1,200.0	0 1.1	3	12,000.0	1.3	1,200.0	1.2
4,	14,000.0 0	0.9	2,000.0	1.2	5	14,520.0	1.5	5 2,208.0	0 2.0	4	14,000.0	1.5	2,000.0	1.9
14,	14,822.0 1	1.0	4,076.1	2.4	4	20,477.0	2.1	1 5,631.2	2 5.2	4	21,588.0	2.3	5,936.8	5.7
	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0 0.0	0	0.0	0.0	0.0	0.0
14,	14,822.0 1	1.0	4,076.1	2.4	4	20,477.0	2.1	1 5,631.2	2 5.2	4	21,588.0	2.3	5,936.8	5.7
	0.0 C	0.0	0.0	0.0	0	0.0	0.0	0.0 C	0.0 0.0	0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0 0.0	0	0.0	0.0	0.0	0.0
364,	364,840.0 24	24.4 3	36,484.0	21.6	64	255,400.0	26.6	3 25,540.0	0 23.6	38	154,120.0	16.7	15,412.0	14.9
		0.0	0.0	0.0	0	0.0	0.0		0.0	0	0.0	0.0	0.0	0.0
222,	222,575.0 14	14.9 2	22,257.5	13.2	18	196,525.0	20.5	5 19,652.5	5 18.1	24	262,725.0	28.4	26,272.5	25.3
162,	162,080.0 10	10.8 3	32,416.0	19.2	8	30,360.0	3.2	2 6,072.0	0 5.6	4	11,600.0	1.3	2,320.0	2.2
106,	106,300.0 7	7.1 1	15,945.0	9.4	3	11,780.0	1.2	2 1,767.0	0 1.6	0	0.0	0.0	0.0	0.0
855,	855,795.0 57	57.2 10	107, 102.5	63.3	93	494,065.0	51.5	5 53,031.5	5 49.0	99	428,445.0	46.3	44,004.5	42.5
204,	204,000.0 13	13.6 2	20,400.0	12.1	29	107,950.0	11.2	2 19,347.5	5 17.9	27	100,050.0	10.8	20,010.0	19.3
	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
		0.0	0.0	0.0	0	0.0	0.0	0.0	0.0 0.0	0	0.0	0.0	0.0	0.0
204,	204,000.0 13		20,400.0	12.1	29	107,950.0	11.2	2 19,347.5	5 17.9	27	100,050.0	10.8	20,010.0	19.3
1,496,	1,496,512.0 100.0	`	169,079.4	100.0	215	960,277.0	100.0	0 108,335.9	9 100.0	194	925,063.0	100.0	103,642.7	100.0

Note: Quantity and others of the specified feed additives manufactured by the registered manufacturers are shown separately in Table 5.

Table 3: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the grade of the preparation, FY 2010)

		Refining grade	Je		Feed grade	Ċ,
Type of the specified feed additives	Passed cases	Passed quantity	Quantity convreted into potency	Passed cases	Passed quantity	Quantity convreted into potency
		kg	kg(potency)		kg	kg(potency)
Zinc bacitracin				10	52,260.0	6,121.0
Enramycin				-	-	-
Nosiheptide	-	I	1	26	88,360.0	3,534.4
Virginiamycin	-	I	1			
Colistin sulfate	22	220,360.0	22,036.0		-	1
Alkyltrimethylammonium calcium oxytetracycline	1	2,000.0	800.0			
Chlortetracycline				3	12,000.0	1,200.0
Sedecamycin	-	I	1			
Tylosin phosphate	4	21,588.0	5,936.8			
Flavophospholipol				-	I	-
Salinomycin sodium	-	1	-	38	154,120.0	15,412.0
Semduramicin sodium	1	I	I			
Narasin				24	262,725.0	26,272.5
Monensin sodium	4	11,600.0	2,320.0			
Lasalocid sodium		-	I			
Avilamycin				27	100,050.0	20,010.0
Efrotomycin	-	-	1			
Bicozamycin	-	1	1			
Total	99	255,548.0	31,092.8	128	669,515.0	72,549.9
Proportion (%)	34.0	27.6	30.0	66.0	72.4	70.0
	specified feed additives Enramycin Nosiheptide Virginiamycin Colistin sulfate Akyltrimethylammonium calcium oxytetracycline Sedecamycin Tylosin phospholipol Flavophospholipol Salinomycin sodium Narasin Monensin sodium Semduramicin sodium Varasin Monensin sodium Semduramicin sodium Semduramicin sodium Narasin Monensin sodium Semduramicin sodium Monensin sodium Monensin sodium Semduramicin sodium Monensin sodium	dditives Passe cified feed cases dditives cases by yoin citracin	Passed cified feed cases     Passed cases     Passed quantity       dditives     cases     quantity       dditives     -     -       vcin     -     -       vycin     -     -       nycin     -     -       nycin sodium     -     -       n     -     -       nycin sodium     -     -       n     -     -       nycin sodium     -     -       nycin sodium     -     -       nycin     -     -	Passed oditives     Passed cases quantity     Passed poten- kg     Currete kg       dditives     kg     kg(poten- kg     kg(poten- kg       vicin     -     -     -       imycin     -     -     -       vytetracycline     -     -     -       inycin     -     -     -       nospholipol     -     -     -       nospholipol     -     -     -       nycin sodium     -     -     -       n     -     -     -       nycin sodium     -     -     -       nycin     -     -       nycin     -     -	DecisionPassed quantityPassed potencyPassed quantityPassed potencyPassed potencyPassed potencydditivescases kgquantity kgpotency kgPassed potencyPassed potencydditivescases kgquantity kgpotency kgPassed potencyPassed potencydditivesycinycinycinwycinwycinwycinwycinwycinwycinwycinwycinwycin sodiumnnnnotin sodiumnnnnn-<	Decision difficied feed casesPassed quantity kgContention potency)Passed casesPassed quantity duantitydifficied difficiescases casesquantity kgpotency)1052,26vcin2,2688,36vcin2,000.05,26vcinvcinvcinvcinvcinmycinvcinsolummycinmycinmycinnycin sodiumnycin sodiumnycin sodiumnycin sodiumnycin sodiumnycin sodiumnycin sodiumnycinnycin <tr< td=""></tr<>



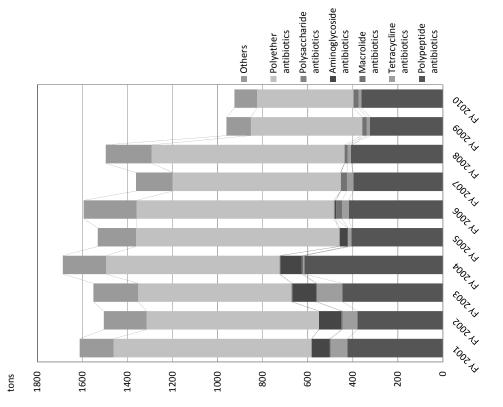


Figure 1: Changes in the testing-passed quantity of the specified feed additives (Sorted by category of antibiotics)

potency (Sorted by category of antibiotics)

Table 4: Number of the testing-passed cases, passed quantity, and quantity converted from the actual quantity into potency

ju eniita taetan.	Passed	Passed	Quantity converted
	cases	quantity	into potency
		kg	kg(potency)
заеристверсен	14	173,980	19,453
r reauquai lei s	(43)	(165,305)	(17,826)
Sapporo	(-) -	(-)	-
Sendai	(-) -	(-)	-
Nagoya	(-) -	(-)  -	-
Kobe	94	518,403	64,642
	(111)	(556,752)	(70,732)
Eribitoho	59	232,680	19,548
LUNUUNA	(61)	(238,220)	(19,778)
LotoT	194	925,063	103,643
I UIAI	(215)	(960,277)	(108,336)

(Sorted by the jurisdiction area of FAMIC, FY 2010)

Data of the previous year are in parentheses.

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0	Quantity converted	into potency	kg(potency)	5,022	560	5,582	35,706	600	35,488	13,335	85,129	90,711	159	fied feed additives)
2010	Manufactured	quantity	kg	62,780	5,600	086,380	357,060	12,000	177,440	88,900	635,400	703,780	163	nanufacturer of speci
	Type of the specified feed	additives		Enramycin	Colistin sulfate (Refining grade)	Subtotal	Salinomycin sodium (Feed grade)	Semduramicin sodium	Monensin sodium	Lasalocid sodium	Subtotal	Total	Ratio to the previous fiscal year (%)	(Hearing from each registered manufacturer of specified feed additives)
	Category	Category			Polypeptide antibiotics			Polyether	antibiotics				Ratio to the	

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## Results of official testing of specified feed additives (FY 2011)

Specified feed additives mean the feed additives for which the standards are set in accordance with the provision of Article 3, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Law No. 35 issued April 11, 1953; hereinafter referred to as "Feed Safety Law") and which are the antibacterial preparations specified in Article 2, item 2 of the Order for Enforcement of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Order No. 198 issued July 16, 1976). Only the specified feed additives with a certificate of passing the testing which the Food and Agricultural Materials Inspection Center (hereinafter referred to as "FAMIC") conducts in accordance with the provisions of Article 5, paragraph 1 of the Feed Safety Law may be distributed; provided, however, that those manufactured by the manufacturers of specified feed additives registered under Article 7, paragraph 1 of the Feed Safety Law (hereinafter referred to as "registered manufacturers of specified feed additives") on which the indication referred to in Article 16 paragraph 1 of the same Law is placed and those manufactured by the foreign manufacturers of specified feed additives registered under Article 21 paragraph 1 which the indication referred to the paragraph 2 of the same Article is placed on may be distributed.

The following report is the summary of the results of official testing of the specified feed additives, which are applied for at FAMIC in FY 2011. The quantity and others of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2011 are also reported.

### 1. Names of applicants and others

Table 1 shows the names of applicants and others concerning the official testing of the specified feed additives in FY 2011.

Seven business entities applied the official testing of specified feed additives. As for their manufacturing forms and others, four of the seven import raw materials for manufacturing or preparations by themselves or purchase them from other companies to manufacture preparations, and the other three import preparations and market them only. There was no business entity which manufactures from raw materials for manufacturing to preparations by itself.

Ten antibiotic preparations (10 in the previous FY) were applied as specified feed additives for a total of 16 brands (16 in the previous FY), which means the numbers of the types of antibiotic preparations and brands did not change from the previous fiscal year. Of them, the types and brands of the antibiotic preparations whose raw materials for manufacturing or preparation are dependent on foreign sources were 9 (9 in the previous FY) and 14 (13 in the previous FY), respectively.

As for the import source countries of preparations and raw material for manufacturing, zinc bacitracin (preparation), monensin sodium (raw material for manufacturing), colistin sulfate (raw material for manufacturing), and alkyltrimethylammonium calcium oxytetracycline (raw material for manufacturing) were imported from China, and salinomycin sodium (raw material for

manufacturing) from China and Bulgaria, chlortetracycline (preparation) from Singapore, tylosin phosphate (preparation) and narasin (preparation) from the USA, and avilamycin (preparation) from the UK. The number of the import source countries was 5 (6 in the previous FY).

### 2. Number of the passed cases of the specified feed additives by type and others

Table 2 shows the results of the number of the passed cases by type, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives in FYs 2009, 2010, and 2011.

One case of salinomycin sodium was not passed because of non-compatibility in the test for property (particle size) in the testing in FY 2011. In FY 2011, 215 cases (application: 216 cases), 997 tons, were passed, and the quantity converted from the actual quantity into potency was 112 tons (potency). All of the passed cases, the passed quantity, and the converted quantity increased compared with the previous fiscal year, 110.8%, 107.8%, and 107.9%, respectively.

The percentage of the antibiotic preparations in the total passed quantity by type was 25.3%, which was the highest one, for narasin (28.4% in the previous FY), followed in descending order by 25.1% for salinomycin sodium (16.7% in the previous FY), 22.1% for colistin sulfate (23.8% in the previous FY), 10.4% for avilamycin (10.8% in the previous FY), and 8.0% for nosiheptide (9.6% in the previous FY). As for the percentage of them in the total of which the quantity converted from the actual quantity into potency, the highest was 22.5% for narasin (25.3% in the previous FY), followed in descending order by 22.4% for salinomycin sodium (14.9% in the previous FY), 19.7% for colistin sulfate (21.3% in the previous FY), 18.6% for avilamycin (19.3% in the previous FY), and 5.3% for zinc bacitracin (5.9% in the previous FY).

Both the passed quantity and the converted quantity of salinomycin sodium, alkyltrimethylammonium calcium oxytetracycline, and avilamycin increased compared with those in FY 2010, while those of narasin, colistin sulfate, nosiheptide, zinc bacitracin, tylosin phosphate, monensin sodium, and chlortetracycline decreased.

Enramycin, semduramicin sodium, and lasalocid sodium since FY 2010, virginiamycin since FY 2008, flavophospholipol since FY 2007, efrotomycin and sedecamycin since FY 2005, and bicozamycin since FY 1999 have not been subjected to the testing, all of which were not also subjected to in FY 2010.

Enramycin and lasalocid sodium were not subjected to the testing, but were manufactured by the registered manufacturers of specified feed additives.

# 3. The number of the testing-passed cases and others of the specified feed additives by refining grade and feed grade and others

The specified feed additives are classified as the refining grade or the feed grade according to the difference of the post-cultivation manufacturing methods. The former is derived from the high purity raw materials for manufacturing in which the only active constituent of an antibiotic is extracted from a culture solution and then refined, while the latter is derived from the low purity raw materials for manufacturing in which a culture solution containing a medium component and a

fungus compound used for manufacturing is dried.

Table 3 shows the number of the testing-passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives by refining grade and feed grade in FY 2011.

Compared between percentages of the refining grade and the feed grade based on the quantity converted from the actual quantity into potency, the feed grade accounted for 72.4 % of the total (70.0 % in the previous FY).

Both the refining grade and the feed grade are set for nosiheptide, colistin sulfate, and salinomycin sodium. In FY 2011, only the refining grade of colistin sulfate, only the feed grade of nosiheptide and salinomycin sodium were subjected to the testing.

#### 4. Changes in the passed quantity and others of antibiotic preparations by category

Figures 1 and 2 show the changes in the testing-passed quantity and the quantity converted from the actual quantity into potency by category of the specified feed additives over the last decade, from 2002 to 2011, respectively.

The passed quantity of antibiotic preparations by category was on a declining trend with repeating increase and decrease since FY 2004, which was the peak, significantly decreased from FY 2008 through to FY 2009, and was the lowest in FY 2010, the lowest of the past 10 years, however it increased slightly in FY 2011 (108% over the previous year). The quantity converted from the actual quantity into potency shows a similar trend. In addition, one type and five types of specified feed additives have been manufactured by the registered manufacturers of specified feed additives since FY 2007 and FY 2009, respectively.

As for the quantity converted from the actual quantity into potency of antibiotic preparations by category, polyether antibiotics has changed at a rate of more than half of the total from FY 2002 to FY 2008 and in the 40% range since FY 2009. In FY 2011, it accounted for 46.6% of the total (42.5% in the previous FY), and polypeptide antibiotics accounted for 27.9% (30.6% in the previous FY).

# 5. Number of the passed cases and others of specified feed additives by the jurisdiction area

Table 4 shows the number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency within the jurisdiction areas of the FAMIC headquarters and respective regional centers in FY 2011.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency in FY 2011 were highest within the jurisdiction area of the Kobe center, followed by the jurisdiction areas of the headquarters, and the Fukuoka center.

The number of the passed cases, the passed quantity and the quantity converted from the actual quantity into potency increased within the jurisdiction area of each center, compared with the previous fiscal year.

In addition, within the jurisdiction areas of the Sapporo, Sendai, and Nagoya centers, there have

been no reports of testing since FY 2005, FY 1995, and FY 2007, respectively. All of them also had no reports in FY 2011.

#### 6. Quantity manufactured by the registered manufacturers of specified feed additives

In accordance with the provision of Article 7, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. in FY 2007 and the Tatsuno Factory, Scientific Feed Laboratory Co., Ltd in FY 2009 were registered as a place of business as a manufacturer of specified feed additivesspecified feed additivess concerning semduramicin sodium and as a place of business as a manufacturer of specified feed additivesspecified feed additives concerning salinomycin sodium, monensin sodium, lasalocid sodium, enramycin and colistin sulfate, respectively. Table 5 shows the manufactured quantity and the quantity converted from the actual quantity into potency by types of antibiotic preparations in FY 2011. Moreover, lasalocid sodium and enramycin have not been applied for the testing and only have manufactured by the registered manufacturers of specified feed additives.

As for the quantity manufactured by the registered manufacturers of specified feed additives, in FY 2011 the total manufactured quantity was 594 tons (84% over the previous year) and the total quantity converted from the actual quantity into potency was 83 tons (92% over the previous year), which accounted for 43% of the total including the quantity that passed the testing. Figures 3 and 4 show the changes in antibiotic preparations by category which passed the testing and the total manufactured quantity and the total quantity converted from the actual quantity into potency by the registered manufactures of specified feed additives over the last decade, from FY 2002 to FY 2011. The total quantity converted from the actual quantity into potency has been flat in the last two years, which was higher than that in FY 2004. The descending order of the manufactured quantities of antibiotic preparations by types was salinomycin sodium (29.6%), narasin (15.8%) and colistin sulfate (14.1%), and the descending order of the quantity converted from the actual quantity into potency was salinomycin sodium (24.1%), monensin sodium (20.6%), and narasin (12.9%).

#### 7. Summary

The results of the official testing of the specified feed additives and the manufacturing by the registered manufacturers of specified feed additives in FY 2011 were as follows.

- Sixteen brands of 10 specified feed additives were applied for the official testing of specified feed additives by 7 business entities.
- (2) The manufacturing of raw materials or preparations for 14 brands of 9 specified feed additives was dependent on foreign sources.
- (3) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency were 215 cases (application: 216 cases), 997 tons, and 112 tons (potency), respectively. All of them increased compared to the previous fiscal year. One case was not passed because of non-compatibility in the test for property (particle size).
- (4) The antibiotic preparations with the highest most passed quantity were narasin (25.3%),

followed by salinomycin sodium, colistin sulfate, avilamycin, and nosiheptide in descending order.

- (5) The antibiotic preparations with the highest quantity converted from the actual quantity into potency were narasin (22.5%), followed by salinomycin sodium, colistin sulfate, avilamycin, and zinc bacitracin in descending order.
- (6) Compared between percentages of the refining grade and the feed grade on the testing-passed quantity converted from the actual quantity into potency of the specified feed additives, the feed grade accounted for 72.4 % of the total.
- (7) The changes in the quantity converted from the actual quantity into potency of the passed preparations over the last decade show that they have decreased with repeating increase and decrease since FY 2004, was the lowest of the past 10 years in FY 2010, and then slightly increased in FY 2011.
- (8) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency by each regional center were the highest within the jurisdiction of the Kobe center.
- (9) Salinomycin sodium, monensin sodium, lasalocid sodium, enramycin, and colistin sulfate were manufactured by the registered manufacturers of specified feed additives.
- (10) When combined the pass of the testing and the manufacture by the registered manufacturers of specified feed additives, the antibiotic preparations with high manufactured quantity were salinomycin sodium (29.6%), narasin and colistin sulfate, and the antibiotic preparations with high quantity converted from the actual quantity into potency were salinomycin sodium (24.1%), monensin sodium and narasin.

Contact office of	Nome of conditiont	Place of	Type of the	Feed	Content potency	Demarks
FAMIC		manufacturing	specified feed additives	grade	(mg (potency)/g)	
		*	Zine hootin	0	100	4,200 unit/g
	Kaken Pharmaceutical Co., Ltd.		Zinc bacitracin	0	150	6,300 unit/g
			Salinomycin sodium	0	100	
neauquai lei s	INICITIKU TAKUTILI NOGYO COLPOLALIOT	Nallayawa	Monensin sodium		200	
	Japan Nutrition Co., Ltd.	Ibaraki	Salinomycin sodium	0	100	
	TNB Co., Ltd.	*	Chlortetracycline	0	100	
			Nosiheptide	0	40	
	Scientific Feed Laboratory Co., Ltd.	Hyogo	Colistin sulfate		100	
V.cho			Tylosin phosphate		275	
NUDE			Avilamycin	0	200	
	Eli Lilly Japan K. K.	*	Narasin	0	100	
			Tylosin phosphate		275	
	Scientific Feed Laboratory Co., Ltd.	Miyazaki	Colistin sulfate		100	
			Alkyltrimethylammonium calcium oxytetracycline		400	
L UKUOKa	Kohkin Chemical Co., Ltd.	Kagoshima	Salinomycin sodium	0	100	
			Nosiheptide	0	40	
Total	7 business entities	8 places			16 brands	

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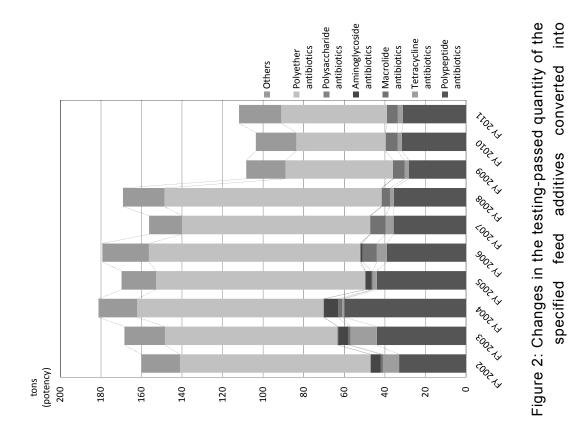
Table 2: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the type of the antibiotics, FYs 2009 to 2011)

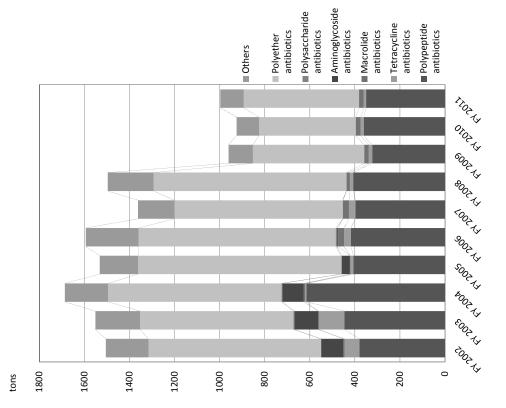
			2009					2010					2011		
- -		ſ		Quantity					Quantity			Ċ		Quantity	
I ype of the specified feed additives	Passed cases	quantity	Compos ition ratio	converted into potency	Compos ition ratio	Passed cases	Passed quantity	Compos ition ratio	converted into potency	Compos ition ratio	Passed cases	Passed quantity	Compos ition ratio	알	Compos ition ratio
		kg	(%)	kg(potency)	(%)		kg	(%)	kg(potency)	(%)		kg	(%)	kg(potency)	(%)
Zinc bacitracin	11	38,325.0	4.0	4,423.8	4.1	10	52,260.0	5.6	6,121.0	5.9	11	49,880.0	5.0	5,984.0	5.3
Enramycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Nosiheptide	20	80,000.0	8.3	3,200.0	3.0	26	88,360.0	9.6	3,534.4	3.4	22	79,760.0	8.0	3,190.4	2.9
Virginiamycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Colistin sulfate	53	204,940.0	21.3	20,494.0	18.9	57	220,360.0	23.8	22,036.0	21.3	55	220,000.0	22.1	22,000.0	19.7
Subtotal	84	323,265.0	33.7	28,117.8	26.0	93	360,980.0	39.0	31,691.4	30.6	88	349,640.0	35.1	31,174.4	27.9
Alkyltrimethylammonium calcium ox ytetracy cline	2	2,520.0	0.3	1,008.0	0.9	1	2,000.0	0.2	800.0	0.8	2	4,000.0	0.4	1,600.0	1.4
Chlortetracycline	З	12,000.0	1.2	1,200.0	1.1	3	12,000.0	1.3	1,200.0	1.2	2	8,000.0	0.8	800.0	0.7
Subtotal	5	14,520.0	1.5	2,208.0	2.0	4	14,000.0	1.5	2,000.0	1.9	4	12,000.0	1.2	2,400.0	2.1
Tylosin phosphate	4	20,477.0	2.1	5,631.2	5.2	4	21,588.0	2.3	5,936.8	5.7	5	19,609.0	2.0	5,392.5	4.8
Sedecamycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Subtotal	4	20,477.0	2.1	5,631.2	5.2	4	21,588.0	2.3	5,936.8	5.7	5	19,609.0	2.0	5,392.5	4.8
Flavophospholipol	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Subtotal	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Salinomycin sodium	64	255,400.0	26.6	25,540.0	23.6	38	154,120.0	16.7	15,412.0	14.9	64	250,612.0	25.1	25,061.2	22.4
Semduramicin sodium	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Narasin	18	196,525.0	20.5	19,652.5	18.1	24	262,725.0	28.4	26,272.5	25.3	23	251,875.0	25.3	25,187.5	22.5
Monensin sodium	80	30,360.0	3.2	6,072.0	5.6	4	11,600.0	1.3	2,320.0	2.2	e	9,260.0	0.9	1,852.0	1.7
Lasalocid sodium	Э	11,780.0	1.2	1,767.0	1.6	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Subtotal	93	494,065.0	51.5	53,031.5	49.0	99	428,445.0	46.3	44,004.5	42.5	06	511,747.0	51.3	52,100.7	46.6
Avilam ycin	29	107,950.0	11.2	19,347.5	17.9	27	100,050.0	10.8	20,010.0	19.3	28	103,975.0	10.4	20,795.0	18.6
Efrotomycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Bicozamycin	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
Subtotal	29	107,950.0	11.2	19,347.5	17.9	27	100,050.0	10.8	20,010.0	19.3	28	103,975.0	10.4	20,795.0	18.6
	215	960,277.0	100.0	108,335.9	100.0	194	925,063.0	100.0	103,642.7	100.0	215	996,971.0	100.0	111,862.6	100.0
Ratio to the previous fiscal year (%)	62 0	64.2		64.1		6 U0	8 96		95.7		110 B	107.8		107 9	

Note: Quantity and others of the specified feed additives manufactured by the registered manufacturers are shown separately in Table 5.

Table 3: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the grade of the preparation, FY 2011)

	(Solieu by the grade of the preparation, FT 2011)	ille glaue		paration, r	1107 1		
			Refining grade	de		Feed grade	0
Category	Type of the specified feed additives	Passed cases	Passed quantity	Quantity convreted into potency	Passed cases	Passed quantity	Quantity convreted into potency
			kg	kg(potency)		kg	kg(potency)
	Zinc bacitracin		I	-	11	49,880.0	5,984.0
Dobinocation	Enramycin	I	I	-	0	0.0	0.0
Pulypeplide	Nosiheptide	0	0.0	0.0	22	79,760.0	3,190.4
	Virginiamycin	0	0.0	0.0	I	Ι	Ι
	Colistin sulfate	55	220,000.0	22,000.0	0	0.0	0.0
Tetracycline	A lkyltrimethylammonium calcium oxytetracycline	2	4,000.0	1,600.0	I	I	I
	Chlortetracycline	I	I	Ι	2	8,000.0	800.0
Macrolide	Sedecamycin	0	0.0	0.0	Ι	I	Ι
antibiotics	Tylosin phosphate	5	19,609.0	5,392.5	Ι	I	Ι
Polysaccharide antibiotics	Flavophospholipol	I	I	I	0	0.0	0.0
	Salinomycin sodium	0	0.0	0.0	64	250,612.0	25,061.2
	Semduramicin sodium	0	0.0	0.0	Ι	I	I
r Ulyeu lei antibiotice	Narasin	Ι	I	Ι	23	251,875.0	25,187.5
	Monensin sodium	3	9,260.0	1,852.0	I	I	Ι
	Lasalocid sodium	0	0.0	0.0	Ι	1	Ι
	Avilamycin	I	Ι	-	28	103,975.0	20,795.0
Others	Efrotomycin	0	0.0	0.0	Ι	I	I
	Bicozamycin	0	0.0	0.0	Ι	Ι	I
Tc	Total	65	252,869.0	30,844.5	150	744,102.0	81,018.1
Propor	Proportion (%)	30.2	25.4	27.6	69.8	74.6	72.4







potency (Sorted by category of antibiotics)

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Table 4: Number of the testing-passed cases, passed quantity, and quantity converted into potency

Contact office of	Passed	Passed	Quantity converted
	cases	quantity	into potency
		kg	kg(potency)
злеристирсен	19	241,752	26,097
i icauquai ici o	(41)	(173,980)	(19,453)
Sapporo	(-) -	(-)	-
Sendai	(-) -	(-)	-
Nagoya	(-) -	(-)  -	(-)
Kohe	96	531,419	65,065
1000	(94)	(518,403)	(64,642)
	69	223,800	20,700
	(59)	(232,680)	(19,548)
lo‡oT	215	996,971	111,863
וטומו	(194)	(925,063)	(103,643)

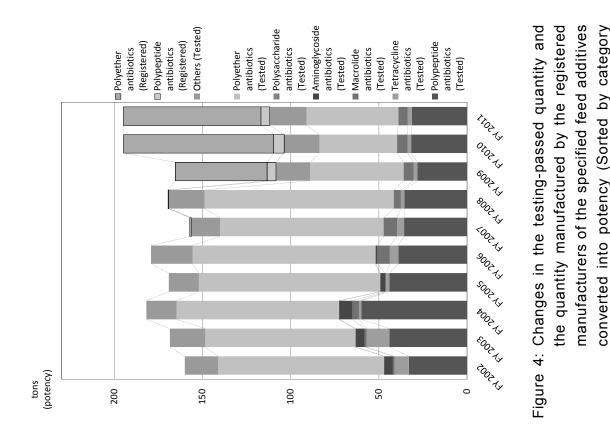
(Sorted by the jurisdiction area of FAMIC, FY 2011)

Data of the previous year are in parentheses.

Table 5: Manufactured quantity by the registered manufacturers of specified feed additives (FY 2011)

			2011
		7	
	Type of the specified feed	Manufactured	Quantity converted
category	additives	quantity	into potency
		kg	kg(potency)
Ш	Enramycin	59,800	4,784
Polypeptide C	Colistin sulfate (Refining	3 920	302
antibiotics	grade)	0,000	
	Subtotal	63,720	5,176
<u></u>	Salinomycin sodium	210 510	0 FC
	(Feed grade)	z 13, J40	
Polyether	Semduramicin sodium	0	0
antibiotics	Monensin sodium	191,700	38,340
	asalocid sodium	118,940	17,841
<u> </u>	Subtotal	530,180	78,135
	Total	593,900	83,311
Ratio to the pr	Ratio to the previous fiscal year (%)	84	26
H/	Hearing from each registered manufacturer of specified feed additives	nanıfactırar of spac	rified feed additives)

(Hearing from each registered manufacturer of specified feed additives)



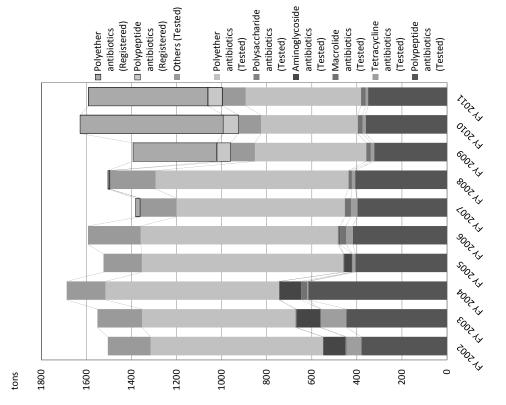


Figure 3: Changes in the testing-passed quantity and the quantity manufactured by the registered manufacturers of the specified feed additives (Sorted by category of antibiotics) of antibiotics)

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## Results of official testing of specified feed additives (FY 2012)

Specified feed additives mean the feed additives for which the standards are set in accordance with the provision of Article 3, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Law No. 35 issued April 11, 1953; hereinafter referred to as "Feed Safety Law") and which are the antibacterial preparations specified in Article 2, item 2 of the Order for Enforcement of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Order No. 198 issued July 16, 1976). Only the specified feed additives with a certificate of passing the testing which the Food and Agricultural Materials Inspection Center (hereinafter referred to as "FAMIC") conducts in accordance with the provisions of Article 5, paragraph 1 of the Feed Safety Law may be distributed; provided, however, that those manufactured by the manufacturers of specified feed additives registered under Article 7, paragraph 1 of the Feed Safety Law (hereinafter referred to as "registered manufacturers of specified feed additives") on which the indication referred to in Article 16 paragraph 1 of the same Law is placed and those manufactured by the foreign manufacturers of specified feed additives registered under Article 21 paragraph 1 which the indication referred to the paragraph 2 of the same Article is placed on may be distributed.

The following report is the summary of the results of official testing of the specified feed additives, which are applied for at FAMIC in FY 2012. The quantity and others of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2012 are also reported.

### 1. Names of applicants and others

Table 1 shows the names of applicants and others concerning the official testing of the specified feed additives in FY 2012.

Eight business entities applied the official testing of specified feed additives. As for their manufacturing forms and others, four of the seven import raw materials for manufacturing or preparations by themselves or purchase them from other companies to manufacture preparations, and the other four import preparations and market them only.

Eleven kinds of specified feed additives (10 in the previous FY), which corresponded to 16 brands (16 in the previous FY), were applied. Of which 10 kinds (10 in the previous FY), 15 brands (14 in the previous FY), were dependent on foreign sources for their raw materials for manufacturing or preparations.

As for the import source countries of raw material for manufacturing and preparations, zinc bacitracin (preparation), colistin sulfate (raw material for manufacturing), alkyltrimethylammonium calcium oxytetracycline (raw material for manufacturing), and monensin sodium (raw material for manufacturing) were imported from China, salinomycin sodium (raw material for manufacturing) from China and Bulgaria, chlortetracycline (preparation) from Singapore, tylosin phosphate (preparation) and narasin (preparation) from the USA, avilamycin (preparation) from the UK and flavophospholipol (preparation) from Bulgaria. The number of the

import source countries was 5 (5 in the previous FY).

#### 2. Number of the passed cases of the specified feed additives by type and others

Table 2 shows the results of the number of the passed cases by type, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives in FYs 2010, 2011, and 2012.

In FY 2012, 190 cases (application: 190 cases) were passed, there were no cases which did not pass the testing. The passed quantity and the quantity converted from the actual quantity into potency were 954 tons and 109 tons (potency). The passed cases, the passed quantity, and the quantity converted from the actual quantity into potency decreased, 88.4%, 95.7%, and 97.0%, respectively, compared with the previous fiscal year.

The percentage of the specified feed additives in the total passed quantity by type was 31.1%, which was the highest one, for narasin (25.3% in the previous FY), followed in descending order by 24.8% for colistin sulfate (22.1% in the previous FY), 24.7% for salinomycin sodium (25.1% in the previous FY), 8.2% for avilamycin (10.4% in the previous FY), and 5.7% for zinc bacitracin (5.0% in the previous FY). As for the percentage of them in the total of which the quantity converted from the actual quantity into potency, the highest was 27.3% for narasin (22.5% in the previous FY), followed in descending order by 21.8% for colistin sulfate (19.7% in the previous FY), 21.7% for salinomycin sodium (22.4% in the previous FY), 14.3% for avilamycin (18.6% in the previous FY), and 5.7% for zinc bacitracin (5.3% in the previous FY).

The passed quantity and the quantity converted from the actual quantity into potency of zinc bacitracin, colistin sulfate, chlortetracycline, tylosin phosphate, flavophospholipol, narasin and monensin sodium increased compared with 2011, while those of nosiheptide, alkyltrimethylammonium calcium oxytetracycline, salinomycin sodium and avilamycin decreased. Enramycin, semduramicin sodium, and lasalocid sodium since FY 2010, virginiamycin since FY 2008, efrotomycin and sedecamycin since FY 2005, and bicozamycin since FY 1999 have not been subjected to the testing, all of which were not also subjected to in FY 2010.

Enramycin and lasalocid sodium were not subjected to the testing, but were manufactured by the registered manufacturers of specified feed additives.

# 3. The number of the testing-passed cases and others of the specified feed additives by refining grade and feed grade and others

The specified feed additives are classified as the refining grade or the feed grade according to the difference of the post-cultivation manufacturing methods. The former is derived from the high purity raw materials for manufacturing in which the only active constituent of an antibiotic is extracted from a culture solution and then refined, while the latter is derived from the low purity raw materials for manufacturing in which a culture solution containing a medium component and a fungus compound used for manufacturing is dried.

Table 3 shows the number of the testing-passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives by refining grade

and feed grade in FY 2012.

Compared between percentages of the refining grade and the feed grade based on the quantity converted from the actual quantity into potency, the feed grade accounted for 70.5 % of the total (72.4 % in the previous FY).

Both the refining grade and the feed grade are set for nosiheptide, colistin sulfate, and salinomycin sodium. In FY 2012, only the refining grade of colistin sulfate, only the feed grade of nosiheptide and salinomycin sodium were subjected to the testing.

### 4. Changes in the passed quantity and others of the specified feed additives by category

Figures 1 and 2 show the changes in the testing-passed quantity and the quantity converted from the actual quantity into potency by category of the specified feed additives over the last decade, from 2003 to 2012, respectively.

The passed quantity of the specified feed additives by category was on a declining trend with repeating increase and decrease since FY 2004, which was the peak, by FY 2008. In FY 2009, it significantly decreased because the manufacturing of some of the specified feed additives were transferred to that by the registered manufacturers of specified feed additives. It was lowest in FY 2010 over the last decade but slightly increased in FY 2011, and then again decreased in FY 2012 (95.7 % over the previous year). The quantity converted from the actual quantity into potency showed a similar trend.

As for the quantity converted from the actual quantity into potency of the specified feed additives by category, polyether antibiotics has changed at a rate of more than half of the total from FY 2003 to FY 2008 and in the 40% range since FY 2009. It accounted for 51.0 % of the total (46.6% in the previous FY), and polypeptide antibiotics accounted for 27.8% (27.9% in the previous FY).

## 5. Number of the passed cases and others of specified feed additives by the jurisdiction area

Table 4 shows the number of the testing-past cases, the passed quantity and the quantity converted from the actual quantity into potency within the jurisdiction areas of the FAMIC headquarters and respective regional centers in FY 2012.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency in FY 2012 were highest within the jurisdiction area of the Kobe center, followed by the jurisdiction areas of the Fukuoka center, and the headquarters.

The number of the passed cases, the passed quantity and the quantity converted from the actual quantity into potency increased within the jurisdiction areas of the Kobe and Fukuoka centers but decreased within the jurisdiction of the headquarters, compared with the previous fiscal year.

In addition, within the jurisdiction areas of the Sapporo, Sendai, and Nagoya centers, there have been no reports of testing since FY 2005, FY 1995, and FY 2007, respectively. All of them also had no reports in FY 2012.

## 6. Quantity of the specified feed additives manufactured by the registered manufacturers of specified feed and other

As of April in 2012, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. was registered as a place of business as a manufacturer of specified feed additives concerning semduramicin sodium and Tatsuno Factory, Scientific Feed Laboratory Co., Ltd., was registered as a place of business as a manufacturer of specified feed additives concerning salinomycin sodium, monensin sodium,

lasalocid sodium, enramycin and colistin sulfate. In addition, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. and Tatsuno Factory, Scientific Feed Laboratory Co., Ltd. were registered as a place of business for nosiheptide in FY 2012.

Table 5 shows the manufactured quantity and the quantity converted from the actual quantity into potency of the specified feed additives by type by the registered manufacturers of specified feed additives in FY 2012. Moreover, lasalocid sodium, semduramicin, and enramycin, which have not undergone the testing as a specified feed additive in FY 2012, were manufactured by the registered manufacturers of specified feed additives.

The quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2012 was 718 tons (121% over the previous year) and the quantity converted from the actual quantity into potency was 89 tons (potency) (107% over the previous year), which accounted for 45% of the total of quantity converted from the actual quantity into potency including the quantity that passed the testing.

Figures 3 and 4 show the changes in the total manufactured quantity of the specified feed additives, the total quantity that passed the testing of the specific feed additives by category and the quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives over the last decade from FY 2003 to FY 2012, and the total quantity converted from the actual quantity into potency. The total quantity converted from the actual quantity into potency increased slightly compared with last year. The descending order of the total manufactured quantity by type was salinomycin sodium (25.8%), narasin (17.7%), and colistin sulfate (14.7%). The descending order of the total quantity converted from the actual quantity into potency was salinomycin sodium (21.8%), monensin sodium (20.5%), and narasin (15.0%).

### 7. Summary

The results of the official testing of the specified feed additives and the manufacturing by the registered manufacturers of specified feed additives in FY 2012 were as follows.

- (1) Sixteen brands of 11 specified feed additives were applied for the official testing of specified feed additives by 8 business entities.
- (2) The manufacturing of raw materials or preparations for 15 brands of 10 specified feed additives was dependent on foreign sources.
- (3) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives were 190 cases (application: 190 cases), 954 tons, and 109 tons (potency), respectively. All of them decreased compared to the previous fiscal year. There were no rejected cases.

- (4) The passed quantity of the specified feed additives was highest for narasin (31.1%), followed by colistin sulfate, salinomycin sodium, avilamycin, and zinc bacitracin in descending order.
- (5) The quantity converted from the actual quantity into potency of the passed specified feed additives was highest for narasin (27.3 %), followed by colistin sulfate, salinomycin sodium, avilamycin, and zinc bacitracin in descending order.
- (6) Compared between percentages of the refining grade and the feed grade on the testing-passed quantity converted from the actual quantity into potency of the specified feed additives, the feed grade accounted for 70.5 % of the total.
- (7) The changes in the quantity converted from the actual quantity into potency of the passed specified feed additives over the last decade show that they have decreased with repeating increase and decrease since FY 2004, was the lowest in the past 10 years in FY 2010, increased in FY 2011, and then again decreased in FY 2012.
- (8) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency by each regional center were the highest within the jurisdiction of the Kobe center.
- (9) The specific feed additives manufactured by the registered manufacturers of specified feed additives were monensin sodium, lasalocid sodium, salinomycin sodium (feed grade), enramycin, nosiheptide (feed grade), colistin sulfate (refining grade) and semduramicin sodium. The quantity converted from the actual quantity into potency was in the same descending order.
- (10) The descending order of the total manufactured quantity consisting of the quantity of the specified feed additives which passed the testing and the quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives was salinomycin sodium (25.8%), narasin, and colistin sulfate. That of the quantity converted from the actual quantity into potency was salinomycin sodium (21.8%), monensin sodium, and narasin.

Contact office of FAMIC	Name of applicant	Place of manufacturing	Type of the specified feed additives	Feed grade	Content potency (mg (potency)/g)	Remarks
		0000000	Salinomycin sodium	0	100	
	NICHIKU TAKUHIH NOGYO COIDOLAUOH	Nallayawa	Monensin sodium		200	
Headquarters	Japan Nutrition Co., Ltd.	Ibaraki	Salinomycin sodium	0	100	
	TNB Co., Ltd.	*	Chlortetracycline	0	100	
	Miyarisan Pharmaceutical Co., Ltd.	*	Flavophospholipol	0	80	
			Colistin sulfate		100	
	scientific reed radoratory Co., Ltd.	Пуодо	Tylosin phosphate		275	
Kobe			Avilamycin	0	200	
	Eli Lilly Japan K. K.	*	Narasin	0	100	
			Tylosin phosphate		275	
	Scientific Feed Laboratory Co., Ltd.	Miyazaki	Colistin sulfate		100	
			Alkyltrimethylammonium calcium oxytetracycline		400	
edenshi. T	Kohkin Chemical Co., Ltd.	Kagoshima	Salinomycin sodium	0	100	
r ukuoka			Nosiheptide	0	40	
		*		0	100	4,200 unit/g
				0	150	6,300 unit/g
Total	8 business entities	9 places			16 brands	

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<b>Table</b>

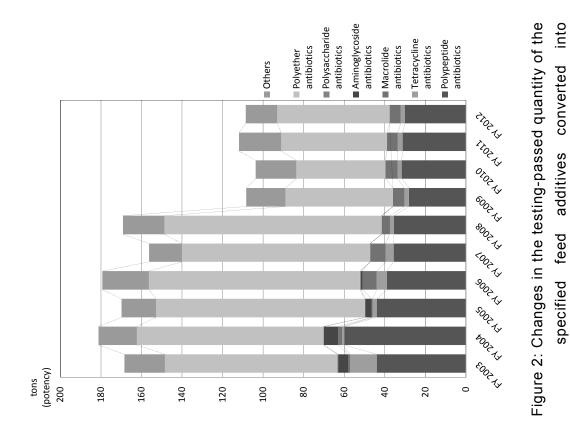
Table 2: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the type of the antibiotics, FYs 2010 to 2012)

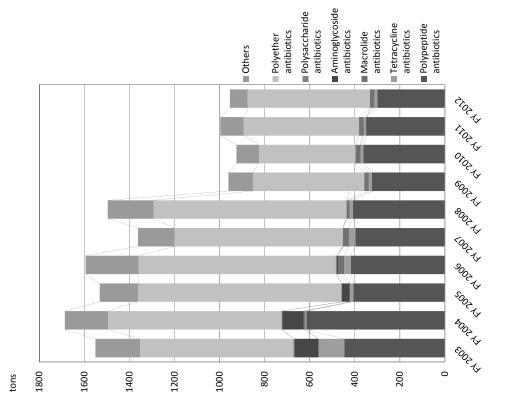
-		2010					1 102					2012		
Doccod			Quantity					Quantity					Quantity	
quantity Compos ition ratio	Compos ition ratio		converted into potency	Compos ition ratio	Passed cases	quantity	Compos ition ratio	s converted into potency	Compos ition ratio	Passed cases	quantity	Compos ition ratio	converted into potency	Compos ition ratio
kg (%)	(%)		kg(potency)	(%)		×	kg (%)	) kg(potency)	(%)		kg	(%)	kg(potency)	(%)
52,260.0 5.6	5.6	-	6,121.0	5.9	11	49,880.0	0 5.0	5,984.0	5.3	10	54,780.0	5.7	6,220.0	2.7
0.0 0.0	0.0	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
88,360.0 9.6	9.6	<u>                                     </u>	3,534.4	3.4	22	79,760.0	0 8.0	3,190.4	2.9	2	8,000.0	0.8	320.0	0.3
0.0 0.0	0.0	1	0.0	0.0	0	0.0	0.0 0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
220,360.0 23.8	23.8		22,036.0	21.3	55	220,000.0	0 22.1	1 22,000.0	19.7	60	236,200.0	24.8	23,620.0	21.8
360,980.0 39.0	39.0		31,691.4	30.6	88	349,640.0	0 35.1	I 31,174.4	27.9	72	298,980.0	31.3	30,160.0	27.8
2,000.0 0.2	0.2		800.0	0.8	2	4,000.0	0.4	1,600.0	1.4	-	2,000.0	0.2	800.0	0.7
12,000.0 1.3	1.3	1	1,200.0	1.2	2	8,000.0	0 0.8	800.0	0.7	З	12,000.0	1.3	1,200.0	1.1
14,000.0 1.5	1.5		2,000.0	1.9	4	12,000.0	0 1.2	2,400.0	2.1	4	14,000.0	1.5	2,000.0	1.8
21,588.0 2.3	2.3		5,936.8	5.7	2	19,609.0	0 2.0	5,392.5	4.8	4	19,700.0	2.1	5,417.5	5.0
0.0 0.0	0.0		0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
21,588.0 2.3	2.3		5,936.8	5.7	5	19,609.0	0 2.0	5,392.5	4.8	4	19,700.0	2.1	5,417.5	5.0
0.0 0.0	0.0		0.0	0.0	0	0.0	0.0 0.0	0.0	0.0	1	1,250.0	0.1	100.0	0.1
	0.0		0.0	0.0	0	0.0	0.0	0.0	0.0	1	1,250.0	0.1	100.0	0.1
154,120.0 16.7	16.7	1	15,412.0	14.9	64	250,612.0	0 25.1	1 25,061.2	22.4	58	235,178.0	24.7	23,517.8	21.7
0.0 0.0	0.0		0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
262,725.0 28.4	28.4		26,272.5	25.3	23	251,875.0	0 25.3	3 25,187.5	22.5	27	296,275.0	31.1	29,627.5	27.3
11,600.0 1.3	1.3	. 8	2,320.0	2.2	3	9,260.0	0.0	9 1,852.0	1.7	с	10,860.0	1.1	2,172.0	2.0
0.0 0.0	0.0		0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
428,445.0 46.3	46.3		44,004.5	42.5	06	511,747.0	0 51.3	3 52,100.7	46.6	88	542,313.0	56.8	55,317.3	51.0
100,050.0 10.8	10.8		20,010.0	19.3	28	103,975.0	0 10.4	t 20,795.0	18.6	21	77,825.0	8.2	15,565.0	14.3
0.0 0.0	0.0		0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
0.0 0.0	0.0	2	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
100,050.0 10.8	10.8	<b>—</b>	20,010.0	19.3	28		0 10.4	t 20,795.0	18.6	21	77,825.0	8.2	15,565.0	14.3
925,063.0 100.0	100.0	$\vdash$	103,642.7	100.0	215	996,971.0	0 100.0	111,862.6	100.0	190	954,068.0	100.0	108,559.8	100.0
96.3		1	1								N 10			

Note: Quantity and others of the specified feed additives manufactured by the registered manufacturers are shown separately in Table 5.

Table 3: Number of the testing-passed cases, passed quantity, and quantity converted from the actual quantity into potency (Sorted by the grade of the preparation, FY 2012)

		2			1		
			Refining grade	le		Feed grade	
	Type of the specified feed	Passed	Passed	Quantity convreted into	Passed	Passed	Quantity convreted into
Calegoly	specified reed additives	cases	quantity	potency	cases	quantity	potency
			kg	kg(potency)		kg	kg(potency)
	Zinc bacitracin				10	54,780.0	6,220.0
Dolynomtido	Enramycin				-	-	I
r ury pepride	Nosiheptide	-	1	I	2	8,000.0	320.0
	Virginiamycin	1	1	1			
	Colistin sulfate	60	236,200.0	23,620.0	-		1
Tetracycline	Alkyltrimethylammonium calcium oxytetracycline	L	2,000.0	800.0			
	Chlortetracycline				3	12,000.0	1,200.0
Macrolide	Sedecamycin	-	ı	I			
antibiotics	Tylosin phosphate	4	19,700.0	5,417.5			
Polysaccharide antibiotics	Flavophospholipol				1	1,250.0	100.0
	Salinomycin sodium	-	-	1	85	235,178.0	23,517.8
	Semduramicin sodium			1			
Pulyeu lei antihiotice	Narasin				27	296,275.0	29,627.5
	Monensin sodium	8	10,860.0	2,172.0			
	Lasalocid sodium	-	-	-			
	Avilamycin				21	77,825.0	15,565.0
Others	Efrotomycin	-	-	-			
	Bicozamycin	-	-	-			
Tc	Total	68	268,760.0	32,009.5	122	685,308.0	76,550.3
Propor	Proportion (%)	35.8	28.2	29.5	64.2	71.8	70.5







potency (Sorted by category of antibiotics)

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Table 4: Number of the testing-passed cases, passed quantity, and quantity converted from the actual quantity into potency

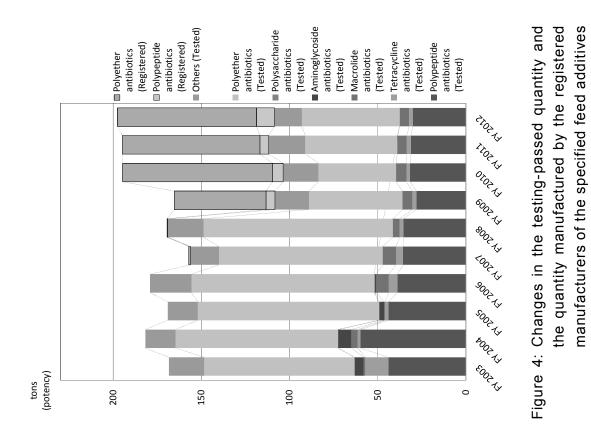
ju eniitin taetun.	Passed	Passed	Quantity converted
	cases	quantity	into potency
		kg	kg(potency)
заеристверсен	45	179,288	18,990
r reauquai lei s	(61)	(241,752)	(26,097)
Sapporo	-	-	I
	(-)	(-)	(-)
Candai	I	I	I
OCIUAI	(-)	(-)	(-)
	-	-	I
Nagoya	(-)	(-)	(-)
UqUy	88	533,800	64,610
NUDG	(92)	(531,419)	(65,065)
	25	240,980	24,960
	(59)	(223,800)	(20,700)
letoT	190	954,068	108,560
וטומו	(215)	(996,971)	(111,863)

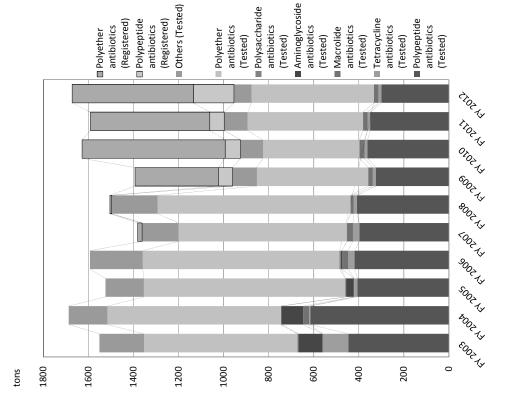
(Sorted by the jurisdiction area of FAMIC, FY 2012)

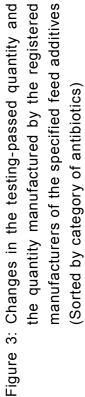
Data of the previous year are in parentheses.

Table 5: Manufactured quantity by the registered manufacturers of specified feed additives (FY 2012)

	Quantity converted into potency	kg(potency)	6,315	928	2,967	10,210	19,554	880	38,324	20,130	78,888	89,098	107	t feed additives)
2012	Manufactured Qu quantity	kg	95,800	9,280	74,180	179,260	195,540	17,600	191,620	134,200	538,960	718,220	121	anufacturer of specified
	Type of the specified feed additives		Enramycin	Colistin sulfate (Refining grade)	Nosiheptide (Feed grade)	Subtotal	Salinomycin sodium (Feed grade)	Semduramicin sodium	Monensin sodium	Lasalocid sodium	Subtotal	Total	Ratio to the previous fiscal year (%)	(Hearing from each registered manufacturer of specified feed additives)
	Category			Polypeptide				Polyether	antibiotics				Ratio to the p	)







converted into potency (Sorted by category

of antibiotics)

<FY2012> - 12 -

## Results of official testing of specified feed additives (FY 2013)

Specified feed additives mean the feed additives for which the standards are set in accordance with the provision of Article 3, paragraph 1 of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Law No. 35 issued April 11, 1953; hereinafter referred to as "Feed Safety Law") and which are the antibacterial preparations specified in Article 2, item 2 of the Order for Enforcement of the Law Concerning Safety Assurance and Quality Improvement of Feeds (Order No. 198 issued July 16, 1976). Only the specified feed additives with a certificate of passing the testing which the Food and Agricultural Materials Inspection Center (hereinafter referred to as "FAMIC") conducts in accordance with the provisions of Article 5, paragraph 1 of the Feed Safety Law may be distributed; provided, however, that those manufactured by the manufacturers of specified feed additives registered under Article 7, paragraph 1 of the Feed Safety Law (hereinafter referred to as "registered manufacturers of specified feed additives") on which the indication referred to in Article 16 paragraph 1 of the same Law is placed and those manufactured by the foreign manufacturers of specified feed additives registered under Article 21 paragraph 1 which the indication referred to the paragraph 2 of the same Article is placed on may be distributed.

The following report is the summary of the results of official testing of the specified feed additives, which are applied for at FAMIC in FY 2013. The quantity and others of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2013 are also reported. At the present time, there is no foreign registered manufacturer of specified feed additives.

### 1. Names of applicants and others

Table 1 shows the names of applicants and others concerning the official testing of the specified feed additives in FY 2013.

Nine business entities (8 in the previous FY) applied the official testing of specified feed additives. The manufacturing forms and others of these business entities: four of them manufacture preparations from raw materials for manufacturing they imported, one of them manufactures preparations from raw materials for manufacturing or preparations it imported, and the other four imported preparation.

Nine types of specified feed additives, corresponding to 15 brands, are applied for the testing in FY 2013 (11 types and 16 brands in the previous FY). The manufacturing of raw materials or preparations of all of them are dependent on foreign countries.

As for the import source countries of raw material for manufacturing or preparations: 1) China for zinc bacitracin (preparation) and colistin sulfate (raw material for manufacturing), 2) the UK for avilamycin (preparation), 3) Singapore for chlortetracycline (preparation), 4) the USA for tylosin phosphate (preparation) and narasin (preparation), 5) Bulgaria for flavophospholipol (preparation) and monensin sodium (raw material for manufacturing), and 6) China and Bulgaria for salinomycin sodium (raw material for manufacturing). The number of the import source countries

was 5 as in the previous fiscal year.

### 2. Number of the passed cases of the specified feed additives by type and others

Table 2 shows the results of the number of the passed cases by type, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives in FYs 2011, 2012, and 2013. Designation of sedecamycin as a feed additive has been revoked in accordance with the amendment of the Ministerial Ordinance concerning the Ingredient Standards for Feed and Feed Additives (Ordinance of Ministry of Agriculture, Forestry and Fisheries No. 35, 1976) in February 6, 2014.

In FY 2013, 197 cases (application: 197 cases) were passed, there were no cases which did not pass the testing. The passed quantity and the quantity converted from the actual quantity into potency were 922 tons and 108 tons (potency), respectively. The passed cases, the passed quantity, and the quantity converted from the actual quantity into potency were 104%, 97%, and 99%, respectively, compared with the previous fiscal year. The cases increased but the quantity and the quantity converted from the actual quantity into potency slightly decreased.

The percentage of the specified feed additives in the total passed quantity by type was 33%, which was the highest one, for salinomycin sodium (25% in the previous FY), followed in descending order by 24% for colistin sulfate (25% in the previous FY), 21% for narasin (31% in the previous FY), 11% for avilamycin (8% in the previous FY), and 5% for zinc bacitracin (6% in the previous FY). As for the percentage of them in the total of which the quantity converted from the actual quantity into potency, the highest was 29% for salinomycin sodium (22% in the previous FY), followed in descending order by 20% for colistin sulfate (22% in the previous FY), 19% for avilamycin (14% in the previous FY), 18% for narasin (27% in the previous FY), and 5% for zinc bacitracin (6% in the previous FY).

Compared with the previous fiscal year, the testing-passed quantity and the quantity converted from the actual quantity into potency of chlortetracycline, tylosin phosphate, flavophospholipol, salinomycin sodium, and avilamycin increased, while those of zinc bacitracin, colistin sulfate, monensin sodium, and narasin decreased.

Nosiheptide and alkyltrimethylammonium calcium oxytetracycline, which were applied for the testing in the previous fiscal year, were not subjected to the testing. Enramycin, semduramicin sodium, and lasalocid sodium since FY 2010, virginiamycin since FY 2008, effotomycin and sedecamycin since FY 2005, and bicozamycin since FY 1999 have not been subjected to the testing, all of which were not also subjected to in FY 2013.

In addition, enramycin, nosiheptide, semduramicin sodium and lasalocid sodium were not subjected to the testing, but were manufactured by the registered manufacturers of specified feed additives as shown in Table 5.

## 3. The number of the testing-passed cases of the specified feed additives by refining grade and feed grade and others

The specified feed additives are classified as the refining grade or the feed grade according to the

difference of the post-cultivation manufacturing methods. The former is derived from the high purity raw materials for manufacturing in which the only active constituent of an antibiotic is extracted from a culture solution and then refined, while the latter is derived from the low purity raw materials for manufacturing in which a culture solution containing a medium component and a fungus compound used for manufacturing is dried.

Table 3 shows the number of the testing-passed cases, the passed quantity, and the quantity converted from the actual quantity into potency of the specified feed additives by refining grade and feed grade in FY 2013.

Compared between percentages of the refining grade and the feed grade based on the testing-passed quantity, the feed grade accounted for 73% of the total (72% in the previous FY). The feed grade also accounted for 73% of the total (71% in the previous FY) by the comparison based on the quantity converted from the actual quantity into potency.

Both the refining grade and the feed grade are set for nosiheptide, colistin sulfate, and salinomycin sodium. In FY 2013, only the refining grade of colistin sulfate and only the feed grade of salinomycin sodium were subjected to the testing.

# 4. Changes in the testing-passed quantity and others of the specified feed additives by category

Figures 1 and 2 show the changes in the testing-passed quantity and the quantity converted from the actual quantity into potency by category of the specified feed additives over the last decade, from 2004 to 2013, respectively.

The total of the testing-passed quantity was on a declining trend with repeating increase and decrease from FY 2004 to FY 2008, significantly decreased in FY 2009 because the manufacturing of some of the specified feed additives were transferred to that by the registered manufacturers of specified feed additives, and since then has stayed about the same. The quantity converted from the actual quantity into potency also showed the same trend.

As for the testing-passed quantity of the specified feed additives by category, polyether antibiotics was highest in each fiscal year and has hovered at a rate of around 50% of the total. In FY 2013, the polyether antibiotics accounted for 56% of the total (57% in the previous FY), followed by the polypeptide antibiotics, 29% (31% in the previous FY).

The quantity converted from the actual quantity into potency was also highest for the polyether antibiotics, which changed at a rate of more than 50% of the total from FY 2004 to FY 2008 and since FY 2009 has remained more than 40%. The polyether antibiotics accounted for 48% (51% in the previous FY), followed by the polypeptide antibiotics, at 25% (28% in the previous FY).

## 5. Number of the testing-passed cases and others of specified feed additives by the jurisdiction area

Table 4 shows the number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency within the jurisdiction areas of the FAMIC headquarters and respective regional centers in FY 2013.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency in FY 2013 were highest within the jurisdiction area of the Kobe center, followed by the jurisdiction areas of the Fukuoka center, and the headquarters.

The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency increased within the jurisdiction areas of the headquarters and the Fukuoka center, but decreased within the jurisdiction areas of the Kobe center, compared with the previous fiscal year.

In addition, within the jurisdiction areas of the Sapporo, Sendai, and Nagoya centers, there have been no reports of testing since FY 2005, FY 1995, and FY 2007, respectively. All of them also had no reports in FY 2013.

## 6. Quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives

As of the end of March in 2014, the 3rd plant, Kyushu Plant, Kohkin Chemical Co., Ltd. is registered as a place of business as a manufacturer of specified feed additives concerning semduramicin sodium and nosiheptide, Tatsuno Factory, Scientific Feed Laboratory Co., Ltd., is registered as a place of business as a manufacturer of specified feed additives concerning salinomycin sodium, monensin sodium, lasalocid sodium, enramycin, colistin sulfate and nosiheptide.

Table 5 shows the manufactured quantity and the quantity converted from the actual quantity into potency of the specified feed additives by the registered manufacturers of specified feed additives in FY 2013. Moreover, semduramicin sodium, nosiheptide, lasalocid sodium and enramycin, which have not undergone the testing as a specified feed additive in FY 2013 were manufactured by the registered manufacturers of specified feed additives.

The quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives in FY 2013 was 685 tons (95% over the previous year) and the quantity converted from the actual quantity into potency was 92 tons (potency) (103% over the previous year).

The descending order of the manufactured quantity in FY 2013 was monensin sodium, salinomycin sodium (feed grade), lasalocid sodium, enramycin, nosiheptide (feed grade), semduramicin sodium, and colistin sulfate (refining grade).

The descending order of the quantity converted from the actual quantity into potency was monensin sodium, lasalocid sodium, salinomycin sodium (feed grade), enramycin, nosiheptide (feed grade), semduramicin sodium, and colistin sulfate (refining grade).

### 7. Total manufactured quantity of the specified feed additives

Table 6 shows the total manufactured quantity and others and the total quantity converted from the actual quantity into potency, which are the total of the testing-passed quantity of the specified feed additives and the quantity manufactured by the registered manufacturers of specified feed additives.

The total manufactured quantity by category in FY 2013 was highest for the polyether antibiotics, 1,074 tons (testing: 514 tons; registration: 560 tons), which accounted for 67% of the total. The descending order by type was salinomycin sodium (31%), monensin sodium (14%), and colistin sulfate (14%). The total quantity converted from the actual quantity into potency by category was also highest for the polyether antibiotics, 136 tons (testing: 52 tons; registration: 84 tons), which accounted for 68% of the total. The descending order by type was salinomycin sodium (25%), monensin sodium (23%), and colistin sulfate (11%).

Figures 3 and 4 show the changes in the total manufactured quantity and others and the total quantity converted from the actual quantity into potency of the specified feed additives by category over the last decade, from FY 2004 to FY 2013, respectively.

There have been significant changes since FY 2009, because the manufacturing of some of the specified feed additives were transferred to that by the registered manufacturers of specified feed additives since FY 2007.

The total manufactured quantity was on a declining trend with repeating increase and decrease from FY 2004 to FY 2009, increased in FY 2010, and since then has stayed about the same. The total quantity converted from the actual quantity into potency was also on a declining trend with repeating increase and decrease from FY 2004 to FY 2009, increased in FY 2010, and since then has been on a slight increasing trend.

In FY 2013, the percentage of the manufacturing by the registered manufacturers of specified feed additives of the total was 43% for the manufactured quantity (43% in the previous FY) and 46% for the quantity converted from the actual quantity into potency (45% in the previous FY).

#### 8. Summary

The results of the official testing of the specified feed additives and the manufacturing by the registered manufacturers of specified feed additives in FY 2013 were as follows.

- (1) Fifteen brands of 9 specified feed additives were applied for the official testing of specified feed additives by 9 business entities. For all of them the manufacturing of raw materials or preparations was dependent on foreign sources.
- (2) The number of the passed cases, the passed quantity, and the quantity converted from the actual quantity into potency were 197 cases (application: 197 cases), 922 tons, and 108 tons (potency), respectively. The cases increased but the quantity and the quantity converted from the actual quantity into potency decreased compared to the previous fiscal year. There were no rejected cases.
- (3) The testing-passed quantity of the specified feed additives by type was highest of salinomycin sodium, followed by colistin sulfate and narasin in descending order.
- (4) The quantity converted from the actual quantity into potency of the specified feed additives passed the testing by type was highest for salinomycin sodium, followed by colistin sulfate and avilamycin in descending order.
- (5) Compared between percentages of the refining grade and the feed grade on the testing-passed quantity and the quantity converted from the actual quantity into potency of the specified

feed additives, the feed grade accounted for 73% of the total.

- (6) The number of the testing-passed cases, the passed quantity and the quantity converted from the actual quantity into potency by jurisdiction area were highest for the Kobe center.
- (7) The quantity of the specified feed additives manufactured by the registered manufacturers of specified feed additives by type was highest for monensin sodium, followed by salinomycin sodium and lasalocid sodium in descending order.
- (8) The quantity converted from the actual quantity into potency of the specified feed additives manufactured by the registered manufacturers of specified feed additives by type was highest for monensin sodium, followed by lasalocid sodium and salinomycin sodium in descending order.
- (9) The total manufactured quantity and others which are the total of the testing-passed quantity of the specified feed additives and the quantity manufactured by the registered manufacturers of specified feed additives, by type was salinomycin sodium, monensin sodium, and colistin sulfate in descending order. The total quantity converted from the actual quantity into potency was the same.

Circle of Interview     Name of applicant     Place of manufacturing     Type of the specified feed additives     Feed grade       Nichiku Yakuhin Kogyo Corporation     Kanagawa     Salinomycin sodium     0       Japan Nutrition Co., Ltd.     baraki     Salinomycin sodium     0       Japan Nutrition Co., Ltd.     *     Chlortetracycline     0       Inscription     Salinomycin sodium     0       Japan Nutrition Co., Ltd.     *     Chlortetracycline     0       Rokku Chemical Products Co., Ltd.     *     Chlortetracycline     0       Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     0       Scientific Feed Laboratory Co., Ltd.     *     Colistin sulfate     0       Bible     Tytosin phosphate     0     0       Scientific Feed Laboratory Co., Ltd.     Marasin     0     0       Scientific Feed Laboratory Co., Ltd.     *     Narasin     0       Scientific Feed Laboratory Co., Ltd.     Marasin     0     0       Scientific Feed Laboratory Co., Ltd.     *     Narasin     0       Scientific Feed Laboratory Co., Ltd.     *     Narasin     0       Scientific Feed Laboratory Co., Ltd.     *     Narasin     0       Scientific Feed Laboratory Co., Ltd.     Mitarsin     0     0	Contact office of FAMIC						
Nichtku Yakuhin Kogyo Corporation     Kanagawa     Balinomycin sodium     o       Japan Nutrition Co., Ltd.     Ibaraki     Salinomycin sodium     o       Japan Nutrition Co., Ltd.     Ibaraki     Salinomycin sodium     o       TNB Co., Ltd.     Ibaraki     Salinomycin sodium     o       Myarisan Pharmaceutical Co., Ltd.     *     Chlortetracycline     o       Myarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Myarisan Pharmaceutical Co., Ltd.     *     Colistin suffate     o       Myarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Myarisan Pharmaceutical Co., Ltd.     *     Colistin suffate     o       Myarisan Pharmaceutical Co., Ltd.     Myosphate     o     o       Eli Lilly Japan K. K.     *     Avilamycin     o       Eli Lilly Japan K. K.     *     Tylosin phosphate     o       Scientific Feed Laboratory Co., Ltd.     Minarsin     o     o       Scientific Feed Laboratory Co., Ltd.     Minarsin     o     o       Eli Lilly Japan K. K.     *     Tylosin phosphate     o       Scientific Feed Laboratory Co., Ltd.     Minarsin     o     o       Scientific Feed Laboratory Co., Ltd.     Minarsin     o     o       Scientific Feed Labora		Name of applicant	Place of manufacturing	Type of the specified feed additives	Feed grade	Content potency (mg (potency)/g)	Remarks
Nuclear advante         Monensin sodium           Japan Nutrition Co., Ltd.         baraki         Salinomycin sodium         0           Japan Nutrition Co., Ltd.         the chloretracycline         0           TNB Co., Ltd.         the chloretracycline         0           Myarisan Pharmaceutical Co., Ltd.         the chloretracycline         0           Scientific Feed Laboratory Co., Ltd.         Hyogo         Colistin sulfate         0           Eli Lilly Japan K. K.         the chloretracycline         0         0           Eli Lilly Japan K. K.         the chloretracycline         0         0           Colistin sulfate         Trylosin phosphate         0         0           Colistin sulfate         colistin sulfate         0         0           Colistin sulfate         Trylosin phosphate         0         0           Colistin sulfate         colistin sulfate         0         0           Colistin sulfate         Trylosin phosphate         0         0           Coetis Japan In		. Vola bio Voeno Comorotion		Salinomycin sodium	o	100	
Japan Nutrition Co., Ltd.     Ibaraki     Salinomycin sodium     o       TNB Co., Ltd.     *     Chlortetracycline     o       TNB Co., Ltd.     *     Chlortetracycline     o       Rokku Chemical Products Co., Ltd.     Shizuoka     Colistin suffate     o       Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin suffate     o       Eli Lilly Japan K. K.     *     Avilamycin     o       Eli Lilly Japan K. K.     *     Avilamycin     o       Eli Lilly Japan K. K.     *     Avilamycin     o       Colistin suffate     Colistin suffate     o       Kill Chemical Co., Ltd.     Kagoshima     Salinonycin sodium     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin suffate     o       Kohkin Chemical Co., Ltd.     Kagoshima     Salinonycin sodium     o       Colostis Japan Inc.     *     Zinc bacitracin     o		u takuilli kogyo coipolalloll	Nallayawa	Monensin sodium		200	
TNB Co., Ltd.     *     Chlortetracycline     o       Rokku Chemical Products Co., Ltd.     Shizuoka     Colistin sulfate     o       Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Kitracial Products Co., Ltd.     *     Flavophospholipol     o       Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin sulfate     o       Eli Lilly Japan K. K.     Avilamycin     o     o       Eli Lilly Japan K. K.     *     Avilamycin     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate     o       Kohkin Chemical Co., Ltd.     Miyazaki     Colistin sulfate     o       Zoetis Japan Inc.     *     Zinc bacitracin     o	•	Nutrition Co., Ltd.	Ibaraki	Salinomycin sodium	0	100	
Rokku Chemical Products Co., Ltd.     Shizuoka     Colistin sulfate       Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     0       Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin sulfate     0       Eli Lilly Japan K. K.     *     Avilamycin     0       Eli Lilly Japan K. K.     *     Avilamycin     0       Eli Lilly Japan K. K.     *     Avilamycin     0       Coletis Laboratory Co., Ltd.     Miyazaki     Colistin sulfate     0       Zoetis Japan Inc.     *     Tylosin phosphate     0       Anasin     Colistin sulfate     0     0	1'	Co., Ltd.	*	Chlortetracycline	0	100	
Miyarisan Pharmaceutical Co., Ltd.     *     Flavophospholipol     o       Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin suffate     o       Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin suffate     o       Fil Lilly Japan K. K.     *     Avilamycin     o       Fil Lilly Japan K. K.     *     Narasin     o       Fil Lilly Japan K. K.     *     Narasin     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin suffate     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin suffate     o       Zoetis Japan Inc.     *     Zinc bacitracin     o	Rokku	Chemical Products Co., Ltd.	Shizuoka	Colistin sulfate		100	
Scientific Feed Laboratory Co., Ltd.     Hyogo     Colistin sulfate       Fit Lilly Japan K. K.     Avilamycin     0       Eli Lilly Japan K. K.     Avilamycin     0       Eli Lilly Japan K. K.     Avilamycin     0       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate       Kohkin Chemical Co., Ltd.     Kagoshima     Salinomycin sodium     0       Zoetis Japan Inc.     *     Zinc bacitracin     0	Miyaris	san Pharmaceutical Co., Ltd.	*	Flavophospholipol	0	80	
Scientific Feed Laboratory Co., Ltd.     Tytosin phosphate       Eli Lilly Japan K. K.     *     Avilamycin     0       Eli Lilly Japan K. K.     *     Narasin     0       Eli Lilly Japan K. K.     *     Narasin     0       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin suffate     0       Scientific Feed Laboratory Co., Ltd.     Kagoshima     Salinomycin sodium     0       Zoetis Japan Inc.     *     Zinc bacitracin     0		itio Food   abaaa Oo		Colistin sulfate		100	
Eli Lilly Japan K. K.     Avilamycin     o       Eli Lilly Japan K. K.     *     Narasin     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin phosphate     o       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate     o       Kohkin Chemical Co., Ltd.     Kagoshima     Salinomycin sodium     o       Zoetis Japan Inc.     *     Zinc bacitracin     o	Scient	inc reeu Laboratory Co., Ltu.	Пуодо	Tylosin phosphate		275	
Eli Lilly Japan K. K.     *     Narasin     0       Tylosin phosphate     Tylosin phosphate     0       Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate     0       Kohkin Chemical Co., Ltd.     Kagoshima     Salinomycin sodium     0       Zoetis Japan Inc.     *     Zinc bacitracin     0	Kobe			Avilamycin	0	200	
Tylosin phosphate         Scientific Feed Laboratory Co., Ltd.       Miyazaki       Colistin sulfate         Kohkin Chemical Co., Ltd.       Kagoshima       Salinomycin sodium       0         Zoetis Japan Inc.       *       Zinc bacitracin       0	Eli Lilly	/ Japan K. K.	*	Narasin	0	100	
Scientific Feed Laboratory Co., Ltd.     Miyazaki     Colistin sulfate       Kohkin Chemical Co., Ltd.     Kagoshima     Salinomycin sodium     0       Zoetis Japan Inc.     *     Zinc bacitracin     0       A husiness entities     10 blaces     10 blaces				Tylosin phosphate		275	
Kohkin Chemical Co., Ltd.     Kagoshima     Salinomycin sodium     0       Zoetis Japan Inc.     *     Zinc bacitracin     0       O husiness entities     10 histores     0	Scient	ific Feed Laboratory Co., Ltd.	Miyazaki	Colistin sulfate		100	
Zoetis Japan Inc. * Zinc bacitracin 0 0	•	n Chemical Co., Ltd.	Kagoshima	Salinomycin sodium	0	100	
20etts Japan Inc. Zinc bacitracin 0 0 business entities 10 bloces	1		*	7	0	100	4,200 unit/g
0 hi isinass antitias 10 nlanas	206112	Japan Inc.	:	ZINC DACINACIN	0	150	6,300 unit/g
	Total	9 business entities	10 places			15 brands	

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	le 1: Names of applicants and others for the of	

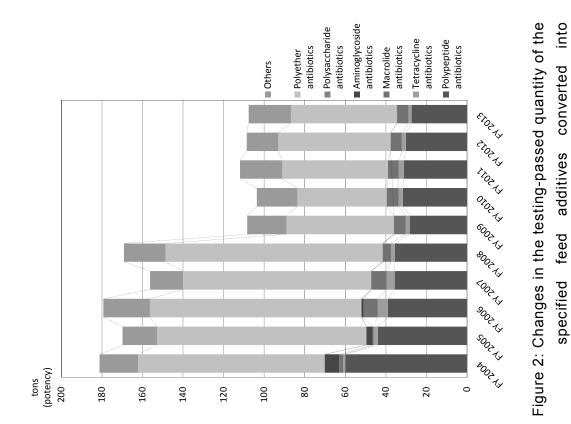
Table 2: Number of the testing-passed cases, passed quantity, and quantity converted into potency (Sorted by the type of the antibiotics, FYs 2011 to 2013)

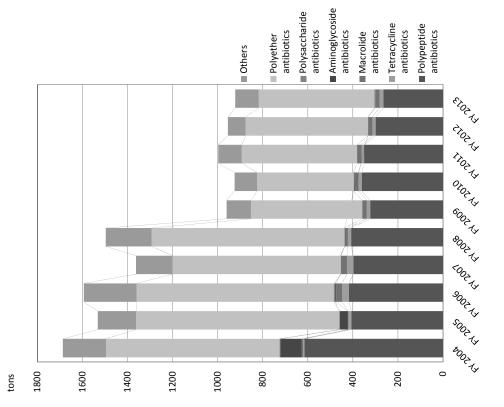
		Compos ition ratio	(%)	5		20			25	-		~	5		5	0	0	-	29			18	48	19			19	100	
	Quantity	converted into potency	kg(potency)	5,241		22,032			27,273	1,600		1,600	5,572		5,572	200	200	1,588	30,812	<u> </u>		19,763	52,163	20,840		-	20,840	107,648	66
2013		Compos ition ratio	(%)	5		24			29	2		2	2		2	0	0	١	33			21	56	11			11	100	
		quantity	kg	44,920		220,320		1	265,240	16,000		16,000	20,262		20,262	2,500	2,500	7,940	308,122			197,625	513,687	104,200			104,200	921,889	97
		Passed cases		8	-	56	-	1	64	4	-	4	4	-	4	1	1	2	76	-	-	18	96	28	1	-	28	197	104
		Compos ition ratio	(%)	9	-	23	-	0	28	1	-	2	5	-	5	0	0	2	22	-		27	51	14		-	14	100	
	Quantity	converted into potency	kg(potency)	6,220		23,620		320	30,160	1,200	800	2,000	5,418		5,418	100	100	2,172	23,518			29,628	55,317	15,565			15,565	108,560	97
2012		Compos ition ratio	(%)	9	-	25	-	-	31	٢	0	-	2	-	2	0	0	٢	25	1		31	57	8		-	8	100	
		quantity	kg	54,780	-	236,200	-	8,000	298,980	12,000	2,000	14,000	19,700	-	19,700	1,250	1,250	10,860	235,178			296,275	542,313	77,825	1	-	77,825	954,068	96
		Passed cases		10	-	60	-	7	72	3	1	4	4	-	4	1	1	3	58	-		27	88	21	1	-	21	190	88
		Compos ition ratio	(%)	5	-	20	-	e	28	١	-	2	5	-	5	-		2	22	-		23	47	19	-	-	19	100	
	Quantity	converted into potency	kg(potency)	5,984		22,000		3,190	31,174	800	1,600	2,400	5,393		5,393			1,852	25,061			25,188	52, 101	20,795			20,795	111,863	108
2011		Compos ition ratio	(%)	5		8		ø	35	-	0	-	2	-	2	-		٢	25	-		25	51	10		-	10	100	
		quantity (	kg	49,880		220,000		79,760	349,640	8,000	4,000	12,000	19,609		19,609			9,260	250,612			251,875	511,747	103,975		-	103,975	996,971	108
		Passed cases		11	-	55	-	22	88	2	2	4	5	-	5		-	З	64	-		23	06	28		-	28	215	111
	T.mo of the encodend	feed additives		Zinc bacitracin	Enramycin -	Nosiheptide	Virginiamycin	Colistin sulfate	Subtotal	Alkyltrimethylammonium calcium oxytetracy cline	Chlortetracycline	Subtotal	Tylosin phosphate	Sedecamycin -	Subtotal	Flavophospholipol	Subtotal -	Salinomycin sodium	Semduramicin sodium	Narasin -	Monensin sodium	Lasalocid sodium	Subtotal	Avilamycin	Efrotomycin -	Bicozamycin	Subtotal	Total	Ratio to the previous fiscal year (%)
		Category				Polypeptide	antibiotics			Tetracycline	antibiotics			Intact olide		Polysaccharide	antibiotics				antibiotics		·					T,	Ratio to the previ

Note: Quantity and others of the specified feed additives manufactured by the registered manufacturers are shown separately in Table 5.

Table 3: Number of the testing-passed cases, passed quantity, and quantity converted into potency

Type of the specified feed additives	Dassed	Refining grade Passed quantity	le Ouantity		Feed grade	
rpe of the cified feed idditives	Daced	Passed quantity	Outantity			
	cases	` -	convreted into potency	Passed cases	Passed quantity	Quantity convreted into potency
		kg	kg(potency)		kg	kg(potency)
Zinc bacitracin				8	44,920	5,241
Enramycin				-	-	-
Nosiheptide		-		-	-	-
Virginiamycin	-	1				
Colistin sulfate	56	220,320	22,032	-	-	I
Alkyltrimethylammonium calcium oxytetracycline		-	-			
Chlortetracycline				4	16,000	1,600
Sedecamycin		1	,			
Tylosin phosphate	4	20,262	5,572			
Flavophospholipol				1	2,500	200
Salinomycin sodium		1	1	76	308,122	30,812
Semduramicin sodium		-				
Narasin				18	197,625	19,763
Monensin sodium	2	7,940	1,588			
-asalocid sodium	-	1				
Avilamycin				28	104,200	20,840
Efrotomycin		-	-			
Bicozamycin		-	-			
	62	248,522	29,192	135	673,367	78,456
Proportion (%)	31	27	27	69	73	73
	ytetracycline irracycline mycin phosphate phosphate iospholipol ycin sodium in sodium id sodium id sodium vycin nycin		-     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       31     -     -     -	-     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       -     -     -     -       31     27     27     2	-       -       -       -       -         -       -       -       -       -       -         m       -       -       -       -       -       -         m       -       -       -       -       -       -       -         m       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$







potency (Sorted by category of antibiotics)

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Table 4: Number of the testing-passed cases, passed quantity, and quantity converted into potency

	, , , , , , , , , , , , , , , , , , ,		
Contact office of	Passed	Passed	Quantity converted
	cases	quantity	into potency
		kg	kg(potency)
заериствреен	<u>9</u> 9	222,042	22,948
i icauquai ici s	(45)	(179,288)	(18,990)
Sapporo	(-) -	(-) -	(-) -
Sendai	(-) -	- (-)	- (-)
Nagova		1 ,	
5	(-)	(-)	(-)
Коћа	79	433,867	57,353
	(88)	(533,800)	(64,610)
	63	265,980	27,347
	(57)	(240,980)	(24,960)
LotoT	197	921,889	107,648
I OLAI	(190)	(954,068)	(108,560)

(Sorted by the jurisdiction area of FAMIC, FY 2013)

Data of the previous year are in parentheses.

Table 5: Manufactured quantity by the registered manufacturers of specified feed additives (FY 2013)

	Ģ		0	410	6	80	02	880	76	2	80	90	103	
2013	Quantity converted into potency	kg(potency)	2,050		2,309	7,768	19,170	×	44,476	19,272	83,798	91,566		sified feed additives
20	Manufactured quantity	kg	63,120	4,100	57,720	124,940	191,700	17,600	222,380	128,480	560,160	685,100	96	manufacturer of spec
	Type of the specified feed additives		Enramycin	Colistin sulfate (Refining grade)	Nosiheptide (Feed grade)	Subtotal	Salinomycin sodium (Feed grade)	Semduramicin sodium	Monensin sodium	Lasalocid sodium	Subtotal	Total	Ratio to the previous fiscal year (%)	(Hearing from each registered manufacturer of specified feed additives)
	Category			Polypeptide				Polyether	antibiotics				Ratio to the	

ole 6: Total manu	6: Total manufactured quantity of the specified feed additives (FY 201:	the specif	ied fee	d additives	: (FY 2	5
		Total		Total quantity		
Category	Type of specified feed additives	quantity *1	Compositi on ratio	converted into potency *2	Compositi on ratio	
		(kg)	(%)	(kg(potency))	(%)	
	Zinc bacitracin	44,920	З	5,241	З	
	Enramycin	63,120	4	5,050	З	
Polypeptide	Nosiheptide	224,420	14	22,442	11	
antibiotics	Virginiamycin	ı	ı	ı	ı	
	Colistin sulfate	57,720	4	2,309	٢	
	Subtotal	390,180	24	35,041	18	
	Chlortetracycline	16,000	٢	1,600	1	
Tetracycline	Alky Itrimethy lammonium					
antibiotics	calcium oxytetracycline	I	ı	I	ı	
	Subtotal	16,000	٢	1,600	1	
	Tylosin phosphate	20,262	۱	5,572	3	
iviaci oliue antibiotice	Sedecamycin	I	ı	I	ı	
	Subtotal	20,262	1	5,572	3	
Polysaccharide	Flavophospholipol	2,500	0	200	0	
antibiotics	Subtotal	2,500	0	200	0	
	Monensin sodium	230,320	14	46,064	23	
	Salinomycin sodium	499,822	31	49,982	25	
Polyether	Lasalocid sodium	128,480	8	19,272	10	
antibiotics	Semduramicin sodium	17,600	1	880	0	
	Narasin	197,625	12	19,763	10	
	Subtotal	1,073,847	29	135,961	68	
	Avilamycin	104,200	9	20,840	10	
Othors	Bicozamycin	-		-		
CILIEIS	Efrotomycin	1	ı	1	ı	
		000 101	•	010 00		

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and the quantity manufactured by the registered manufacturers \*2 The total quantity converted into potency of the testing-passed quantity and the quantity manufactured by the registered manufacturers

\*1 The total quantity of the specified feed additives of the testing-passed quantity

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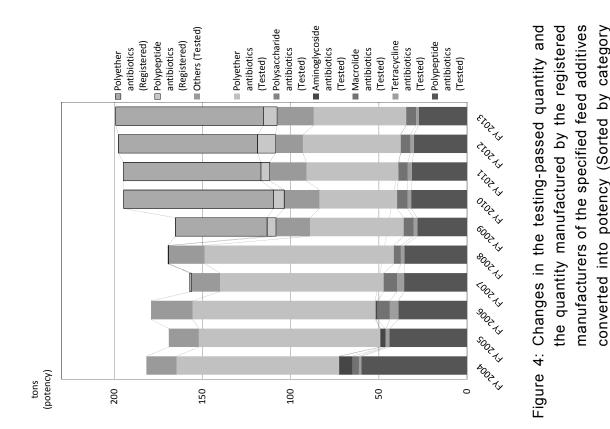
20,840 199,214

6 100

104,200 1,606,989

Subtotal

Total



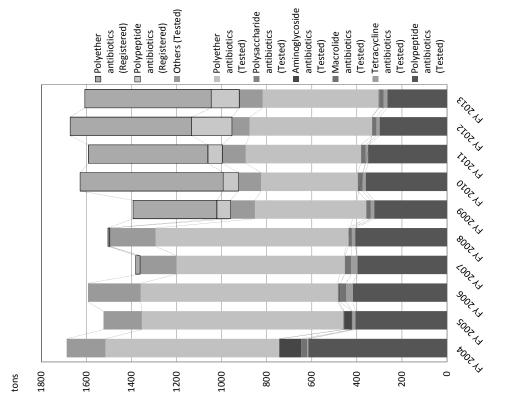


Figure 3: Changes in the testing-passed quantity and the quantity manufactured by the registered manufacturers of the specified feed additives (Sorted by category of antibiotics) of antibiotics)