



옵티팜
OPTIPHARM

2015년 양돈 질병 세균 항생제 내성 검사 결과

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SAFETY! INNOVATION, PRECISION, CLEANLINESS

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1. 항생제 감수성/ 내성 기준

항생제 감수성/ 내성 기준

• 항생제 종류 및 기준(디스크 확산법 기준으로 검역원 자료 참조)

약제명	감수성	효과 중간	내성	약제명	감수성	효과 중간	내성
Amikacin(AK30)	17	13	6	Gentamicin(CN10)	17	13	6
Amoxicillin(AML30)	17	13	6	Linsmycin(LS109)	17	13	6
Ampicillin(AMP10)	16	13	6	Neomycin(N30)	17	13	6
Cefazolin(KZ30)	17	14	6	Penicillin G(P10)	15	13	6
Tilmicosin(TIL15)	17	14	6	Tiamulin H.Fumarate(Ti25)	17	13	6
Colistin(CT10)	11	9	6	Streptomycin(S10)	15	11	6
Enrofloxacin(ENR5)	18	13	6	Tetracycline(T30)	23	18	6
Florfenicol(FFC25)	18	13	6	Trimethoprim/ Sulfamethoxazole(STX25)	18	15	6
Ceftiofur sodium(C2.5)	17	12	6	Tylosin tartrate(Ty25)	18	13	6

• 항생제 종류 및 기준

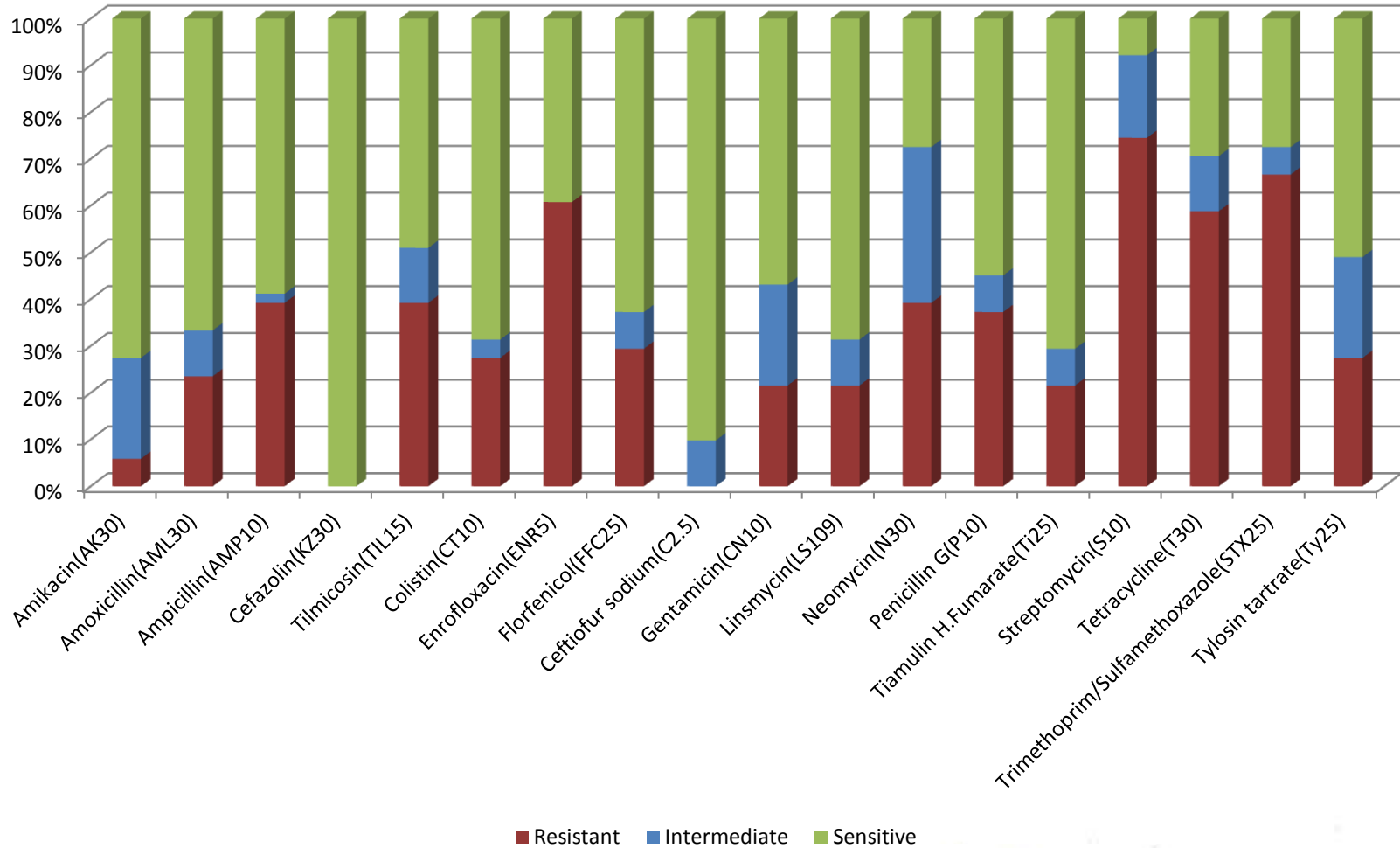
Sensitive(감수성)	감수성이 있다는 의미로 치료 효과를 기대할 수 있음.
Resistant(내성)	내성이 있다는 의미로 치료효과 없음.
Intermediate(효과 중간)	감수성과 내성의 중간 정도.

2. 호흡기 질병 5종 소화기 질병 3종

Haemophilus parasuis

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	31	51	3	5.9%	11	21.6%	37	72.5%
Amoxicillin(AML30)			12	23.5%	5	9.8%	34	66.7%
Ampicillin(AMP10)			20	39.2%	1	2.0%	30	58.8%
Cefazolin(KZ30)			0	0.0%	0	0.0%	51	100.0%
Tilmicosin(TIL15)			20	39.2%	6	11.8%	25	49.0%
Colistin(CT10)			14	27.5%	2	3.9%	35	68.6%
Enrofloxacin(ENR5)			31	60.8%	0	0.0%	20	39.2%
Florphenicol(FFC25)			15	29.4%	4	7.8%	32	62.7%
Ceftiofur sodium(C2.5)			0	0.0%	5	9.8%	46	90.2%
Gentamycin(CN10)			11	21.6%	11	21.6%	29	56.9%
Linsmycin(LS109)			11	21.6%	5	9.8%	35	68.6%
Neomycin(N30)			20	39.2%	17	33.3%	14	27.5%
Penicillin G(P10)			19	37.3%	4	7.8%	28	54.9%
Tiamulin H.Fumarate(Ti25)			11	21.6%	4	7.8%	36	70.6%
Streptomycin(S10)			38	74.5%	9	17.6%	4	7.8%
Tetracycline(T30)			30	58.8%	6	11.8%	15	29.4%
Trimethoprim/ Sulfamethoxazole(STX25)			34	66.7%	3	5.9%	14	27.5%
Tylosin tartrate(Ty25)			14	27.5%	11	21.6%	26	51.0%

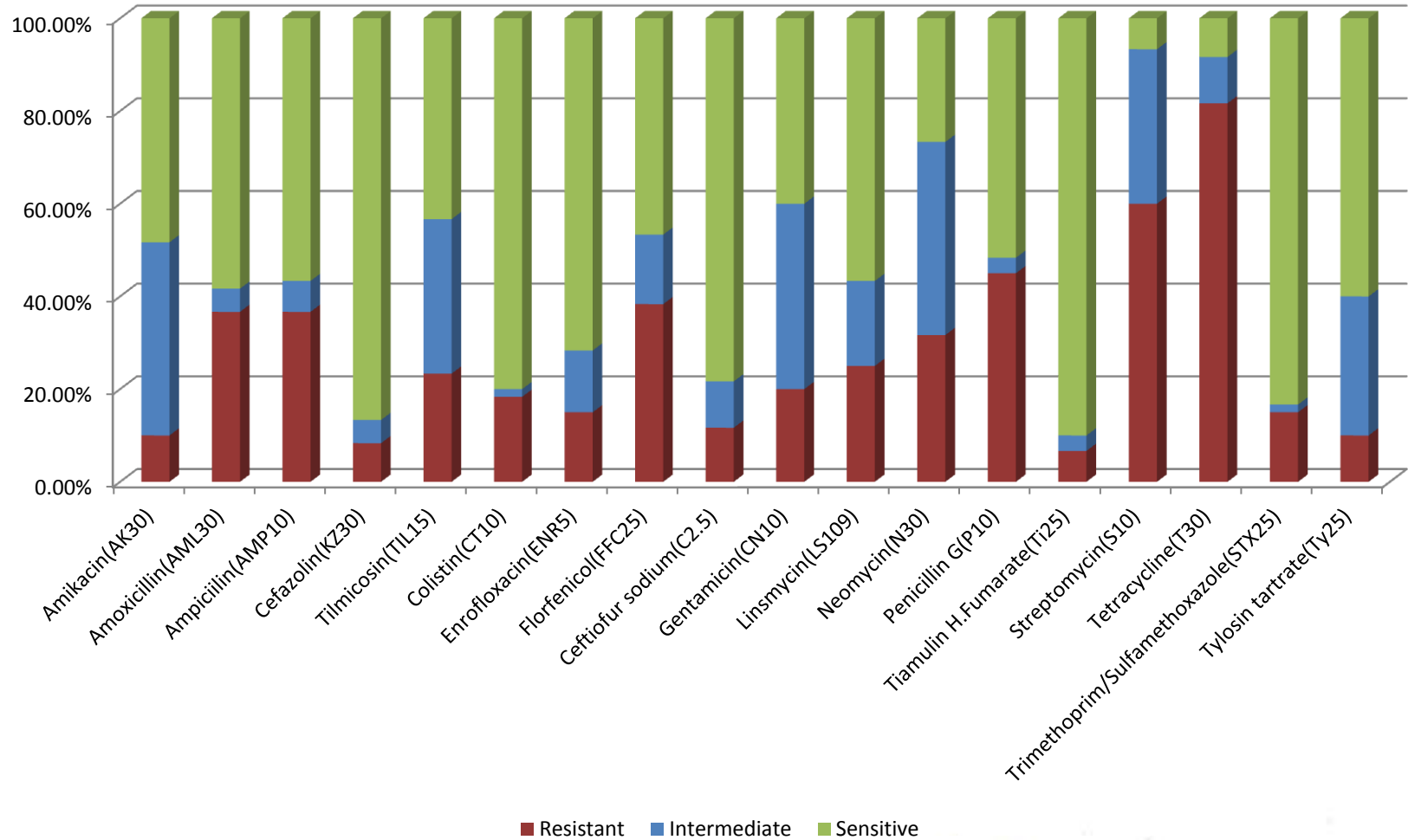
Haemophilus parasuis



Actinobacillus pleuropneumoniae

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	42	60	6	10.0%	25	41.7%	29	48.3%
Amoxicillin(AML30)			22	36.7%	3	5.0%	35	58.3%
Ampicillin(AMP10)			22	36.7%	4	6.7%	34	56.7%
Cefazolin(KZ30)			5	8.3%	3	5.0%	52	86.7%
Tilmicosin(TIL15)			14	23.3%	20	33.3%	26	43.3%
Colistin(CT10)			11	18.3%	1	1.7%	48	80.0%
Enrofloxacin(ENR5)			9	15.0%	8	13.3%	43	71.7%
Florphenicol(FFC25)			23	38.3%	9	15.0%	28	46.7%
Ceftiofur sodium(C2.5)			7	11.7%	6	10.0%	47	78.3%
Gentamicin(CN10)			12	20.0%	24	40.0%	24	40.0%
Linsmycin(LS109)			15	25.0%	11	18.3%	34	56.7%
Neomycin(N30)			19	31.7%	25	41.7%	16	26.7%
Penicillin G(P10)			27	45.0%	2	3.3%	31	51.7%
Tiamulin H.Fumarate(Ti25)			4	6.7%	2	3.3%	54	90.0%
Streptomycin(S10)			36	60.0%	20	33.3%	4	6.7%
Tetracycline(T30)			49	81.7%	6	10.0%	5	8.3%
Trimethoprim/ Sulfamethoxazole(STX25)			9	15.0%	1	1.7%	50	83.3%
Tylosin tartrate(Ty25)			6	10.0%	18	30.0%	36	60.0%

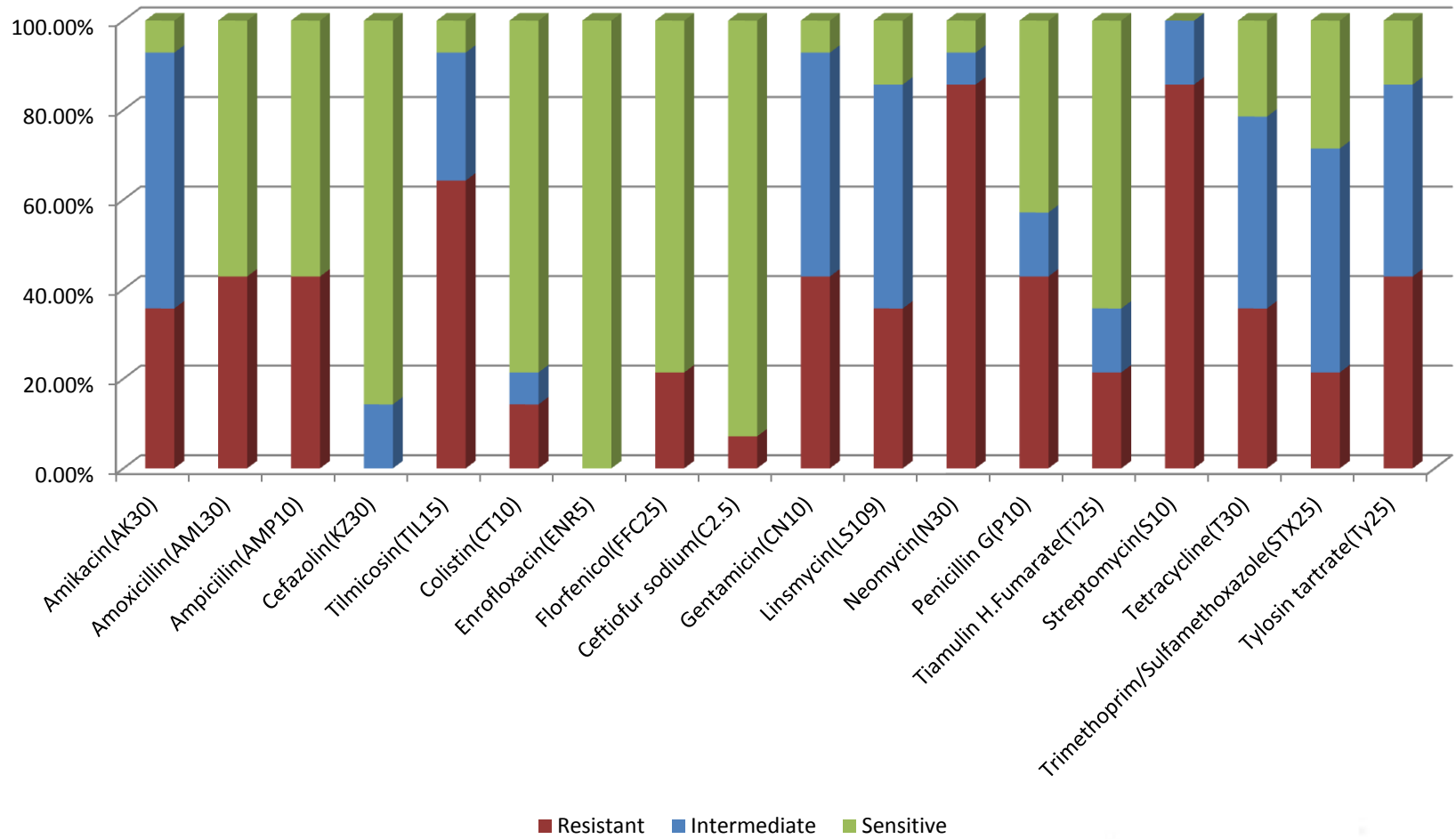
Actinobacillus pleuropneumoniae



Actinobacillus suis

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	8	14	5	35.7%	8	57.1%	1	7.1%
Amoxicillin(AML30)			6	42.9%	0	0.0%	8	57.1%
Ampicillin(AMP10)			6	42.9%	0	0.0%	8	57.1%
Cefazolin(KZ30)			0	0.0%	2	14.3%	12	85.7%
Tilmicosin(TIL15)			9	64.3%	4	28.6%	1	7.1%
Colistin(CT10)			2	14.3%	1	7.1%	11	78.6%
Enrofloxacin(ENR5)			0	0.0%	0	0.0%	14	100.0%
Florphenicol(FFC25)			3	21.4%	0	0.0%	11	78.6%
Ceftiofur sodium(C2.5)			1	7.1%	0	0.0%	13	92.9%
Gentamicin(CN10)			6	42.9%	7	50.0%	1	7.1%
Linsmycin(LS109)			5	35.7%	7	50.0%	2	14.3%
Neomycin(N30)			12	85.7%	1	7.1%	1	7.1%
Penicillin G(P10)			6	42.9%	2	14.3%	6	42.9%
Tiamulin H.Fumarate(Ti25)			3	21.4%	2	14.3%	9	64.3%
Streptomycin(S10)			12	85.7%	2	14.3%	0	0.0%
Tetracycline(T30)			5	35.7%	6	42.9%	3	21.4%
Trimethoprim/ Sulfamethoxazole(STX25)			3	21.4%	7	50.0%	4	28.6%
Tylosin tartrate(Ty25)			6	42.9%	6	42.9%	2	14.3%

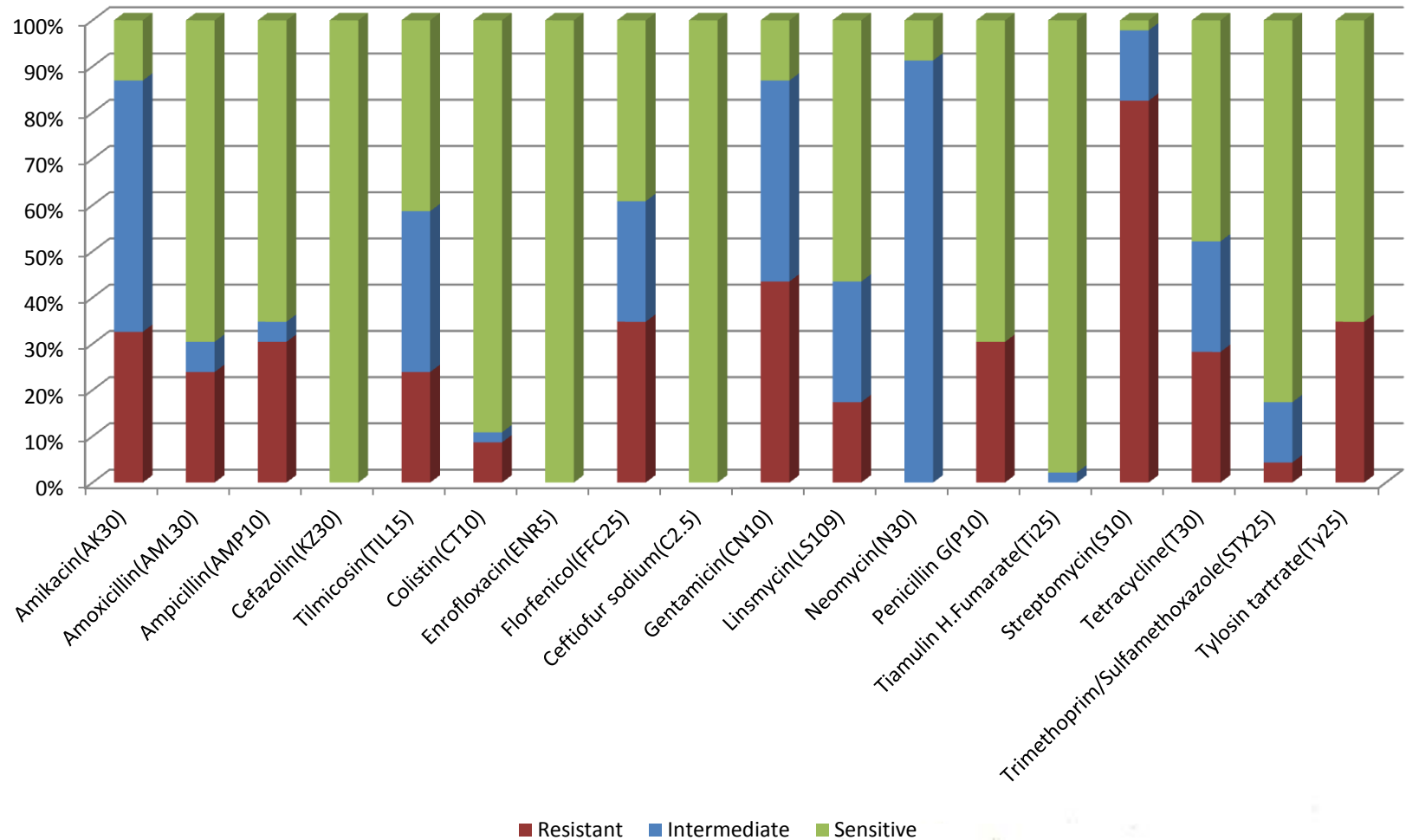
Actinobacillus suis



Pasteurella multocida

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	28	46	15	32.6%	25	54.3%	6	13.0%
Amoxicillin(AML30)			11	23.9%	3	6.5%	32	69.6%
Ampicillin(AMP10)			14	30.4%	2	4.3%	30	65.2%
Cefazolin(KZ30)			0	0.0%	0	0.0%	46	100.0%
Tilmicosin(TIL15)			11	23.9%	16	34.8%	19	41.3%
Colistin(CT10)			4	8.7%	1	2.2%	41	89.1%
Enrofloxacin(ENR5)			0	0.0%	0	0.0%	46	100.0%
Florphenicol(FFC25)			16	34.8%	12	26.1%	18	39.1%
Ceftiofur sodium(C2.5)			0	0.0%	0	0.0%	46	100.0%
Gentamycin(CN10)			20	43.5%	20	43.5%	6	13.0%
Linsmycin(LS109)			8	17.4%	12	26.1%	26	56.5%
Neomycin(N30)			0	0.0%	42	91.3%	4	8.7%
Penicillin G(P10)			14	30.4%	0	0.0%	32	69.6%
Tiamulin H.Fumarate(Ti25)			0	0.0%	1	2.2%	45	97.8%
Streptomycin(S10)			38	82.6%	7	15.2%	1	2.2%
Tetracycline(T30)			13	28.3%	11	23.9%	22	47.8%
Trimethoprim/ Sulfamethoxazole(STX25)			2	4.3%	6	13.0%	38	82.6%
Tylosin tartrate(Ty25)			16	34.8%	0	0.0%	30	65.2%

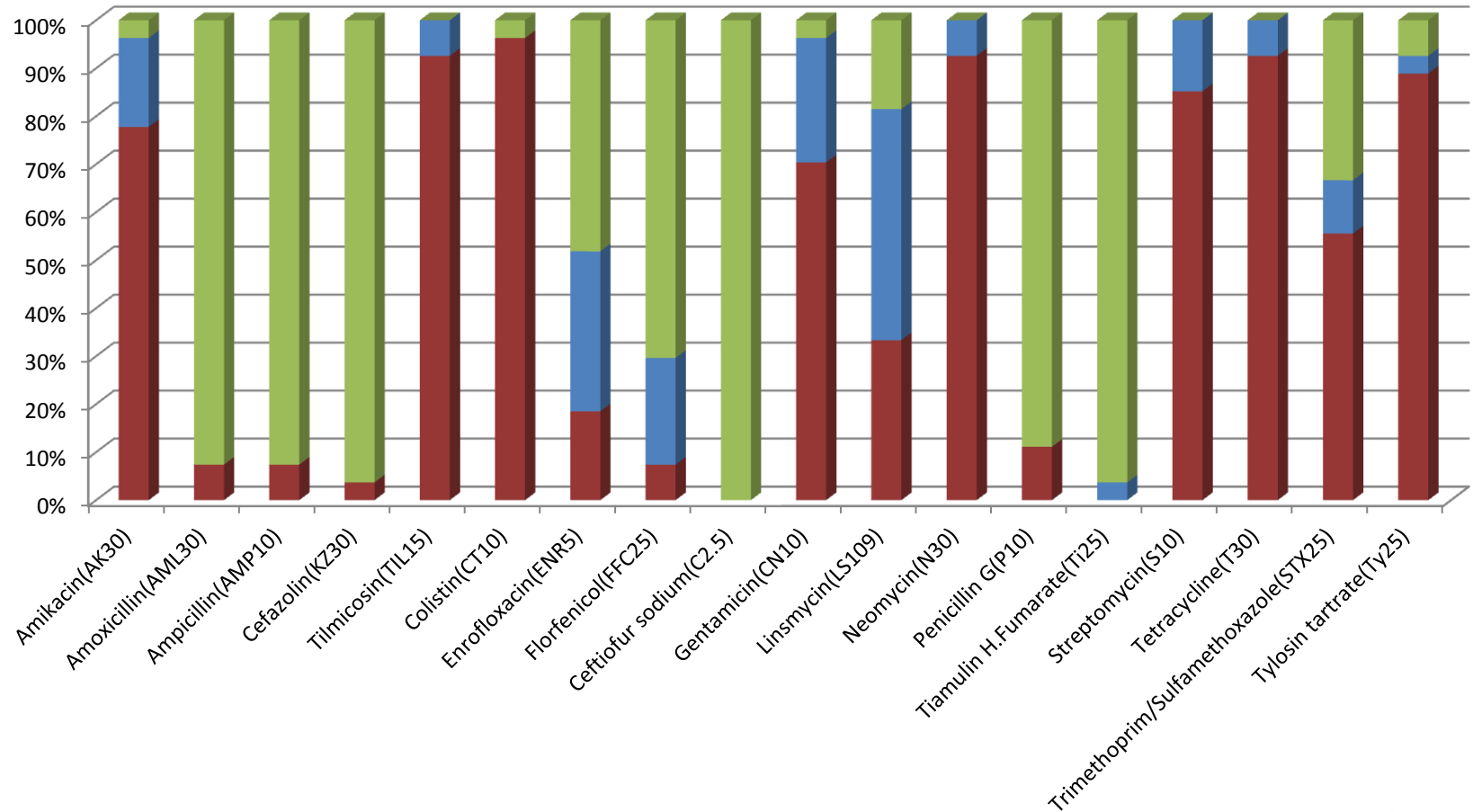
Pasteurella multocida



Streptococcus suis

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	18	27	21	77.8%	5	18.5%	1	3.7%
Amoxicillin(AML30)			2	7.4%	0	0.0%	25	92.6%
Ampicillin(AMP10)			2	7.4%	0	0.0%	25	92.6%
Cefazolin(KZ30)			1	3.7%	0	0.0%	26	96.3%
Tilmicosin(TIL15)			25	92.6%	2	7.4%	0	0.0%
Colistin(CT10)			26	96.3%	0	0.0%	1	3.7%
Enrofloxacin(ENR5)			5	18.5%	9	33.3%	13	48.1%
Florphenicol(FFC25)			2	7.4%	6	22.2%	19	70.4%
Ceftiofur sodium(C2.5)			0	0.0%	0	0.0%	27	100.0%
Gentamycin(CN10)			19	70.4%	7	25.9%	1	3.7%
Linsmycin(LS109)			9	33.3%	13	48.1%	5	18.5%
Neomycin(N30)			25	92.6%	2	7.4%	0	0.0%
Penicillin G(P10)			3	11.1%	0	0.0%	24	88.9%
Tiamulin H.Fumarate(Ti25)			0	0.0%	1	3.7%	26	96.3%
Streptomycin(S10)			23	85.2%	4	14.8%	0	0.0%
Tetracycline(T30)			25	92.6%	2	7.4%	0	0.0%
Trimethoprim/ Sulfamethoxazole(STX25)			15	55.6%	3	11.1%	9	33.3%
Tylosin tartrate(Ty25)			24	88.9%	1	3.7%	2	7.4%

Streptococcus suis

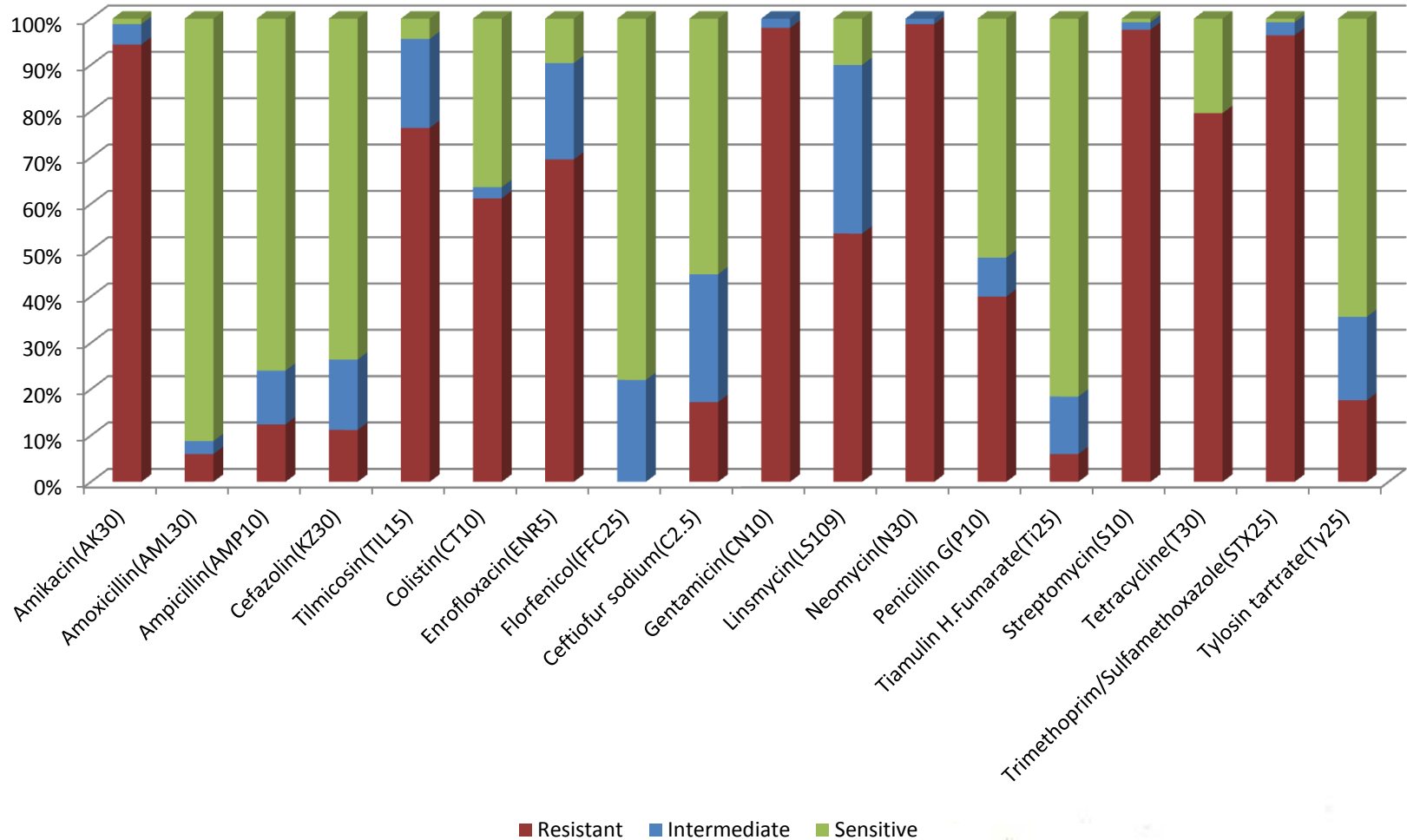


■ Resistant ■ Intermediate ■ Sensitive

Clostridium perfringens

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	98	250	236	94.4%	11	4.4%	3	1.2%
Amoxicillin(AML30)			15	6.0%	7	2.8%	228	91.2%
Ampicillin(AMP10)			31	12.4%	29	11.6%	190	76.0%
Cefazolin(KZ30)			28	11.2%	38	15.2%	184	73.6%
Tilmicosin(TIL15)			191	76.4%	48	19.2%	11	4.4%
Colistin(CT10)			153	61.2%	6	2.4%	91	36.4%
Enrofloxacin(ENR5)			174	69.6%	52	20.8%	24	9.6%
Florphenicol(FFC25)			0	0.0%	55	22.0%	195	78.0%
Ceftiofur sodium(C2.5)			43	17.2%	69	27.6%	138	55.2%
Gentamycin(CN10)			245	98.0%	5	2.0%	0	0.0%
Linsmycin(LS109)			134	53.6%	91	36.4%	25	10.0%
Neomycin(N30)			247	98.8%	3	1.2%	0	0.0%
Penicillin G(P10)			100	40.0%	21	8.4%	129	51.6%
Tiamulin H.Fumarate(Ti25)			15	6.0%	31	12.4%	204	81.6%
Streptomycin(S10)			244	97.6%	4	1.6%	2	0.8%
Tetracycline(T30)			199	79.6%	0	0.0%	51	20.4%
Trimethoprim/ Sulfamethoxazole(STX25)			241	96.4%	7	2.8%	2	0.8%
Tylosin tartrate(Ty25)			44	17.6%	45	18.0%	161	64.4%

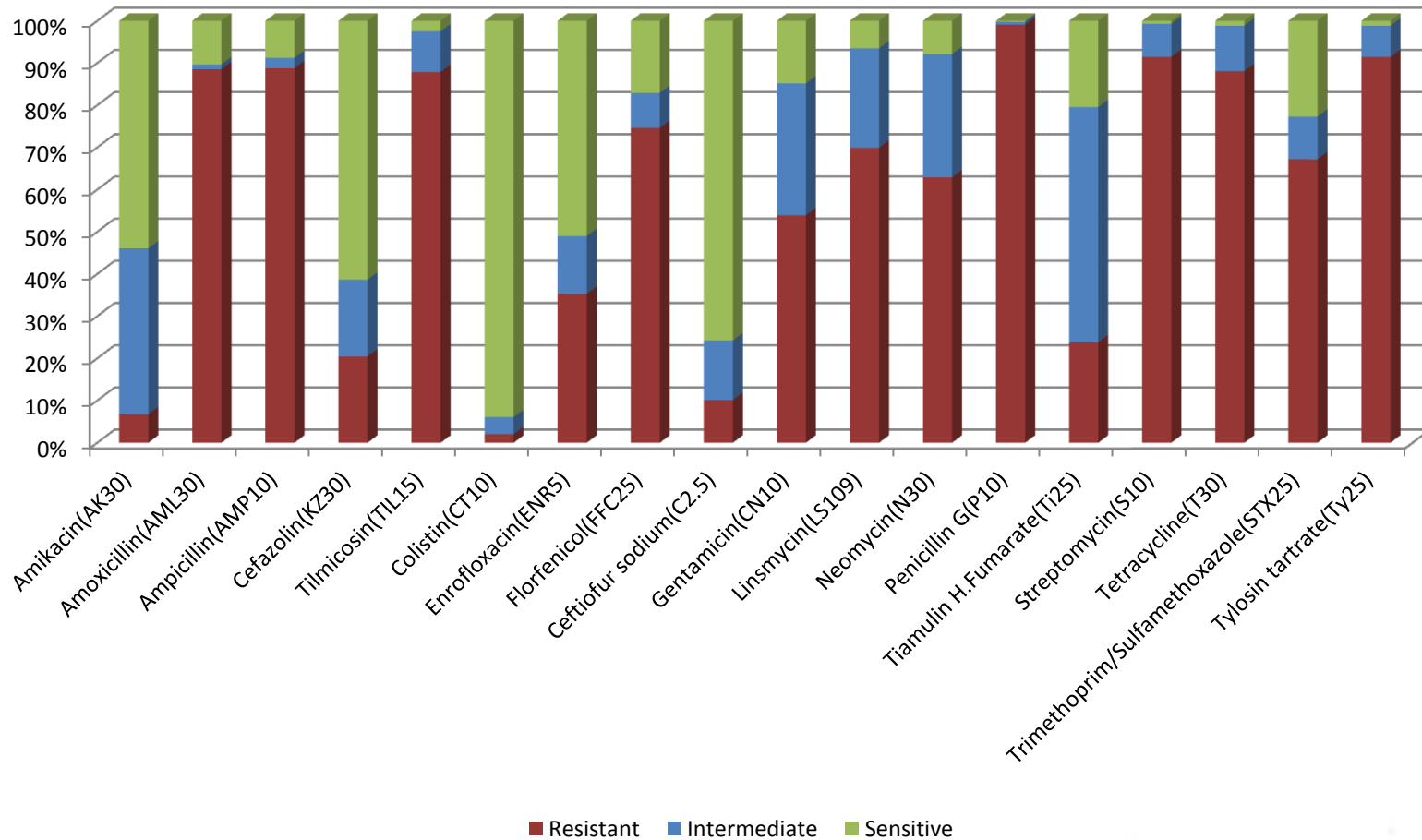
Clostridium perfringens



Escherichia coli

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	228	445	30	6.7%	175	39.3%	240	53.9%
Amoxicillin(AML30)			394	88.5%	5	1.1%	46	10.3%
Ampicillin(AMP10)			395	88.8%	11	2.5%	39	8.8%
Cefazolin(KZ30)			91	20.4%	81	18.2%	273	61.3%
Tilmicosin(TIL15)			391	87.9%	43	9.7%	11	2.5%
Colistin(CT10)			9	2.0%	18	4.0%	417	93.7%
Enrofloxacin(ENR5)			157	35.3%	61	13.7%	227	51.0%
Florphenicol(FFC25)			332	74.6%	37	8.3%	76	17.1%
Ceftiofur sodium(C2.5)			45	10.1%	63	14.2%	337	75.7%
Gentamycin(CN10)			240	53.9%	139	31.2%	66	14.8%
Linsmycin(LS109)			311	69.9%	105	23.6%	29	6.5%
Neomycin(N30)			280	62.9%	130	29.2%	35	7.9%
Penicillin G(P10)			441	99.1%	3	0.7%	1	0.2%
Tiamulin H.Fumarate(Ti25)			106	23.8%	248	55.7%	91	20.4%
Streptomycin(S10)			407	91.5%	35	7.9%	3	0.7%
Tetracycline(T30)			392	88.1%	48	10.8%	5	1.1%
Trimethoprim/ Sulfamethoxazole(STX25)			299	67.2%	45	10.1%	101	22.7%
Tylosin tartrate(Ty25)			407	91.5%	33	7.4%	5	1.1%

Escherichia coli



Salmonella spp.(serogroup B)

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	12	17	2	11.8%	6	35.3%	9	52.9%
Amoxicillin(AML30)			13	76.5%	2	11.8%	2	11.8%
Ampicillin(AMP10)			13	76.5%	2	11.8%	2	11.8%
Cefazolin(KZ30)			7	41.2%	1	5.9%	9	52.9%
Tilmicosin(TIL15)			17	100.0%	0	0.0%	0	0.0%
Colistin(CT10)			0	0.0%	1	5.9%	16	94.1%
Enrofloxacin(ENR5)			3	17.6%	4	23.5%	10	58.8%
Florfenicol(FFC25)			7	41.2%	0	0.0%	10	58.8%
Ceftiofur sodium(C2.5)			5	29.4%	2	11.8%	10	58.8%
Gentamicin(CN10)			11	64.7%	5	29.4%	1	5.9%
Linsmycin(LS109)			10	58.8%	5	29.4%	2	11.8%
Neomycin(N30)			11	64.7%	5	29.4%	1	5.9%
Penicillin G(P10)			17	100.0%	0	0.0%	0	0.0%
Tiamulin H.Fumarate(Ti25)			3	17.6%	6	35.3%	8	47.1%
Streptomycin(S10)			13	76.5%	4	23.5%	0	0.0%
Tetracycline(T30)			15	88.2%	1	5.9%	1	5.9%
Trimethoprim/Sulfamethoxazole(STX25)			10	58.8%	2	11.8%	5	29.4%
Tylosin tartrate(Ty25)			17	100.0%	0	0.0%	0	0.0%

Salmonella spp.(serogroup B)

