



옵티팜
OPTIPHARM

2017년 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)	22	16	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

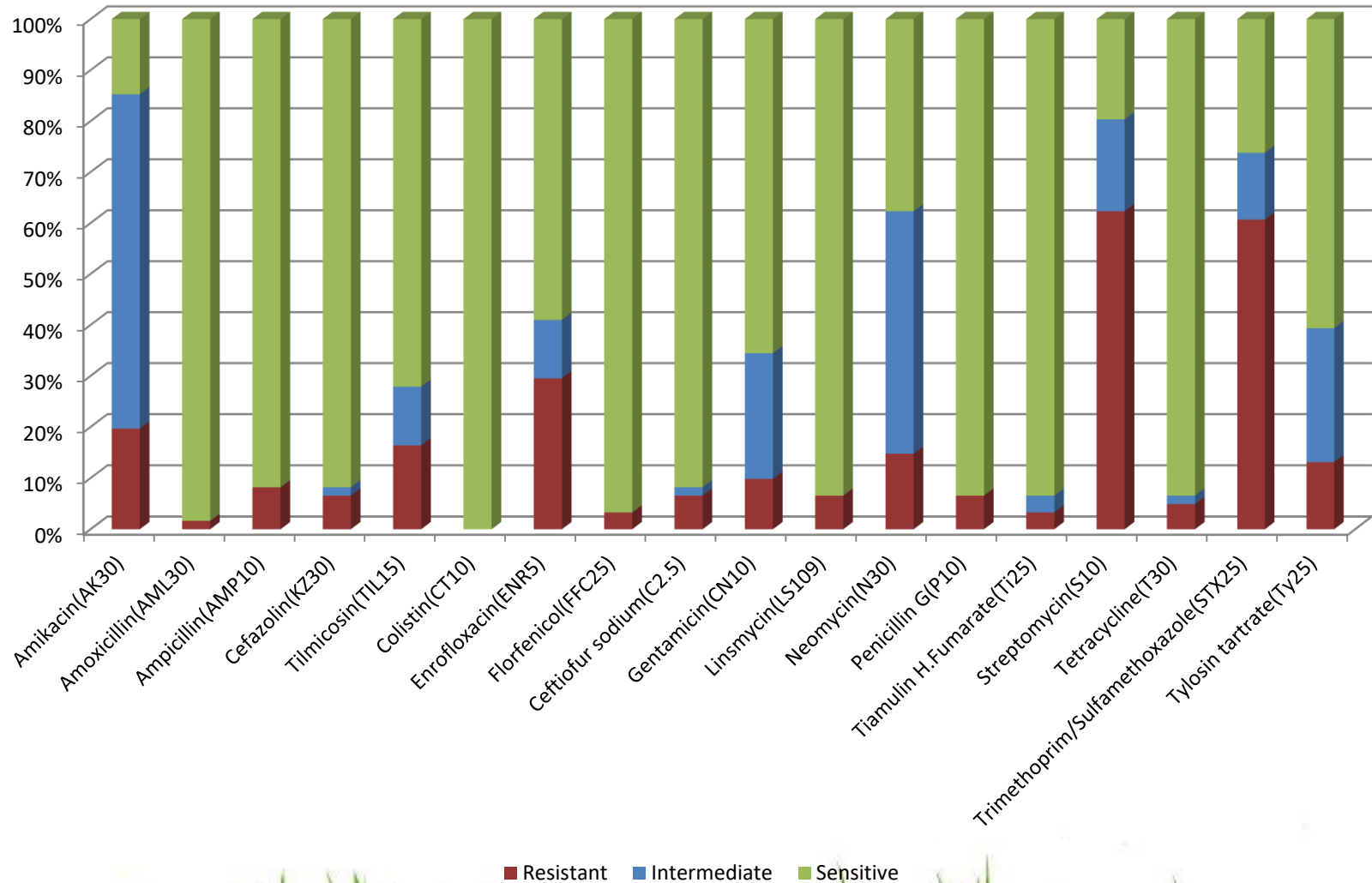
Sensitive(감수성)	감수성이 있다는 의미로 치료 효과를 기대할 수 있음.
Resistant(내성)	내성이 있다는 의미로 치료효과 없음.
Intermediate(효과 중간)	감수성과 내성의 중간 정도.

2. 호흡기 질병 5종 소화기 질병 3종

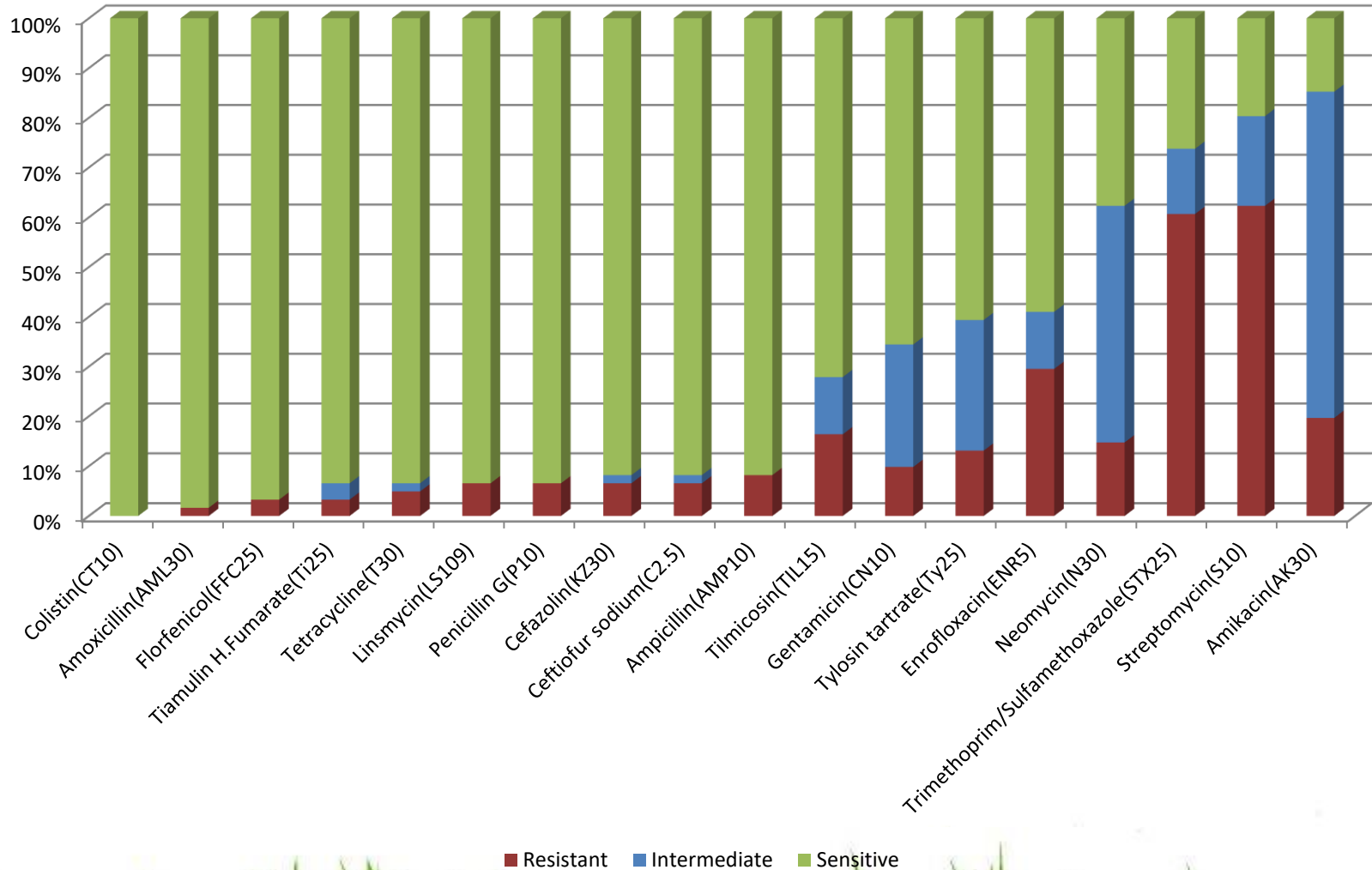
Haemophilus parasuis

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	38	61	12	19.7%	40	65.6%	9	14.8%
Amoxicillin(AML30)			1	1.6%	0	0.0%	60	98.4%
Ampicillin(AMP10)			5	8.2%	0	0.0%	56	91.8%
Cefazolin(KZ30)			4	6.6%	1	1.6%	56	91.8%
Tilmicosin(TIL15)			10	16.4%	7	11.5%	44	72.1%
Colistin(CT10)			0	0.0%	0	0.0%	61	100.0%
Enrofloxacin(ENR5)			18	29.5%	7	11.5%	36	59.0%
Florphenicol(FFC25)			2	3.3%	0	0.0%	59	96.7%
Ceftiofur sodium(C2.5)			4	6.6%	1	1.6%	56	91.8%
Gentamycin(CN10)			6	9.8%	15	24.6%	40	65.6%
Linsmycin(LS109)			4	6.6%	0	0.0%	57	93.4%
Neomycin(N30)			9	14.8%	29	47.5%	23	37.7%
Penicillin G(P10)			4	6.6%	0	0.0%	57	93.4%
Tiamulin H.Fumarate(Ti25)			2	3.3%	2	3.3%	57	93.4%
Streptomycin(S10)			38	62.3%	11	18.0%	12	19.7%
Tetracycline(T30)			3	4.9%	1	1.6%	57	93.4%
Trimethoprim/ Sulfamethoxazole(STX25)			37	60.7%	8	13.1%	16	26.2%
Tylosin tartrate(Ty25)			8	13.1%	16	26.2%	37	60.7%

Haemophilus parasuis



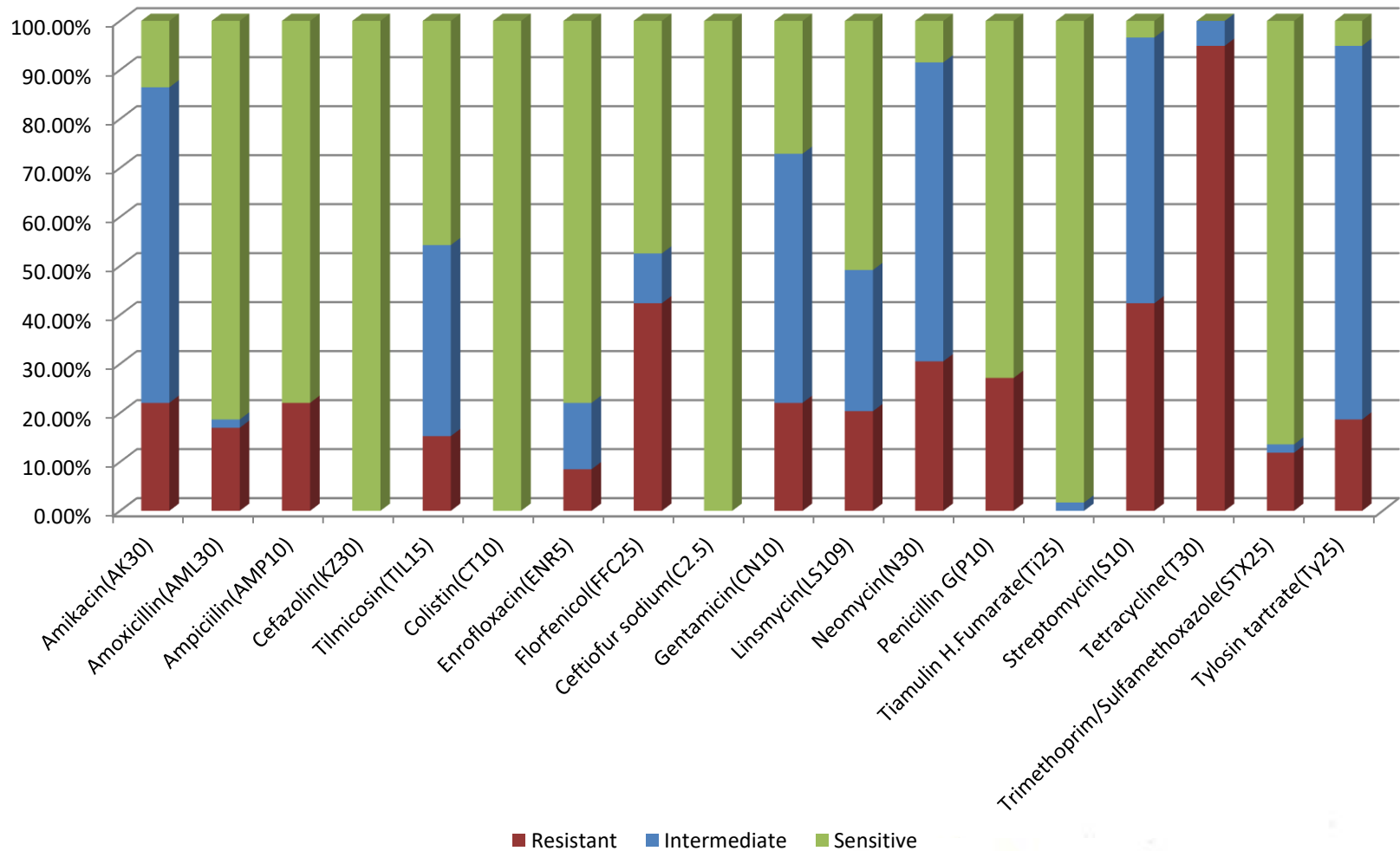
Haemophilus parasuis



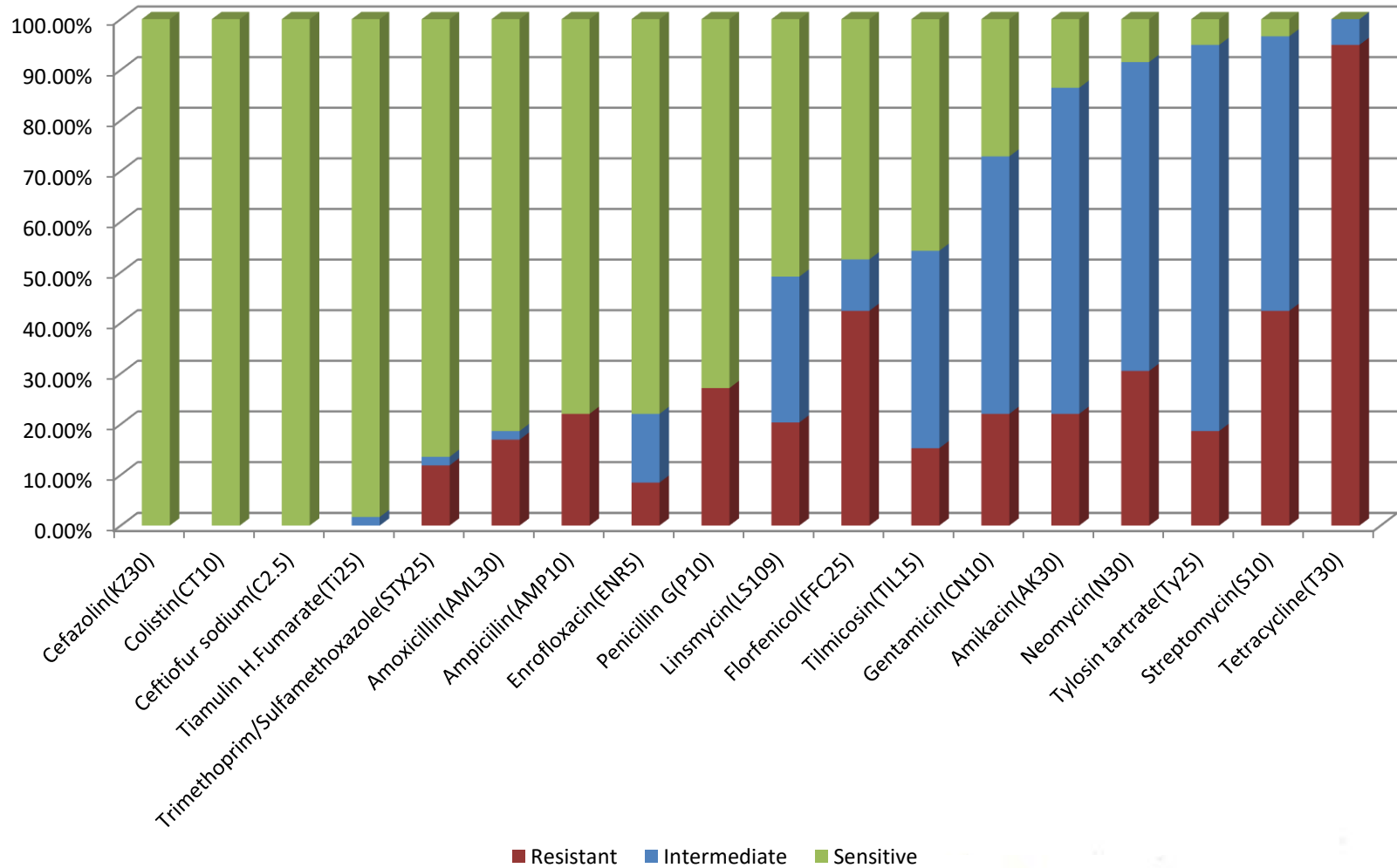
Actinobacillus pleuropneumoniae

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	36	59	13	22.0%	38	64.4%	8	13.6%
Amoxicillin(AML30)			10	16.9%	1	1.7%	48	81.4%
Ampicillin(AMP10)			13	22.0%	0	0.0%	46	78.0%
Cefazolin(KZ30)			0	0.0%	0	0.0%	59	100.0%
Tilmicosin(TIL15)			9	15.3%	23	39.0%	27	45.8%
Colistin(CT10)			0	0.0%	0	0.0%	59	100.0%
Enrofloxacin(ENR5)			5	8.5%	8	13.6%	46	78.0%
Florphenicol(FFC30)			25	42.4%	6	10.2%	28	47.5%
Ceftiofur sodium(C30)			0	0.0%	0	0.0%	59	100.0%
Gentamicin(CN10)			13	22.0%	30	50.8%	16	27.1%
Linsmycin(LS109)			12	20.3%	17	28.8%	30	50.8%
Neomycin(N30)			18	30.5%	36	61.0%	5	8.5%
Penicillin G(P10)			16	27.1%	0	0.0%	43	72.9%
Tiamulin H.Fumarate(Ti25)			0	0.0%	1	1.7%	58	98.3%
Streptomycin(S10)			25	42.4%	32	54.2%	2	3.4%
Tetracycline(T30)			56	94.9%	3	5.1%	0	0.0%
Trimethoprim/ Sulfamethoxazole(STX25)			7	11.9%	1	1.7%	51	86.4%
Tylosin tartrate(Ty25)			11	18.6%	45	76.3%	3	5.1%

Actinobacillus pleuropneumoniae



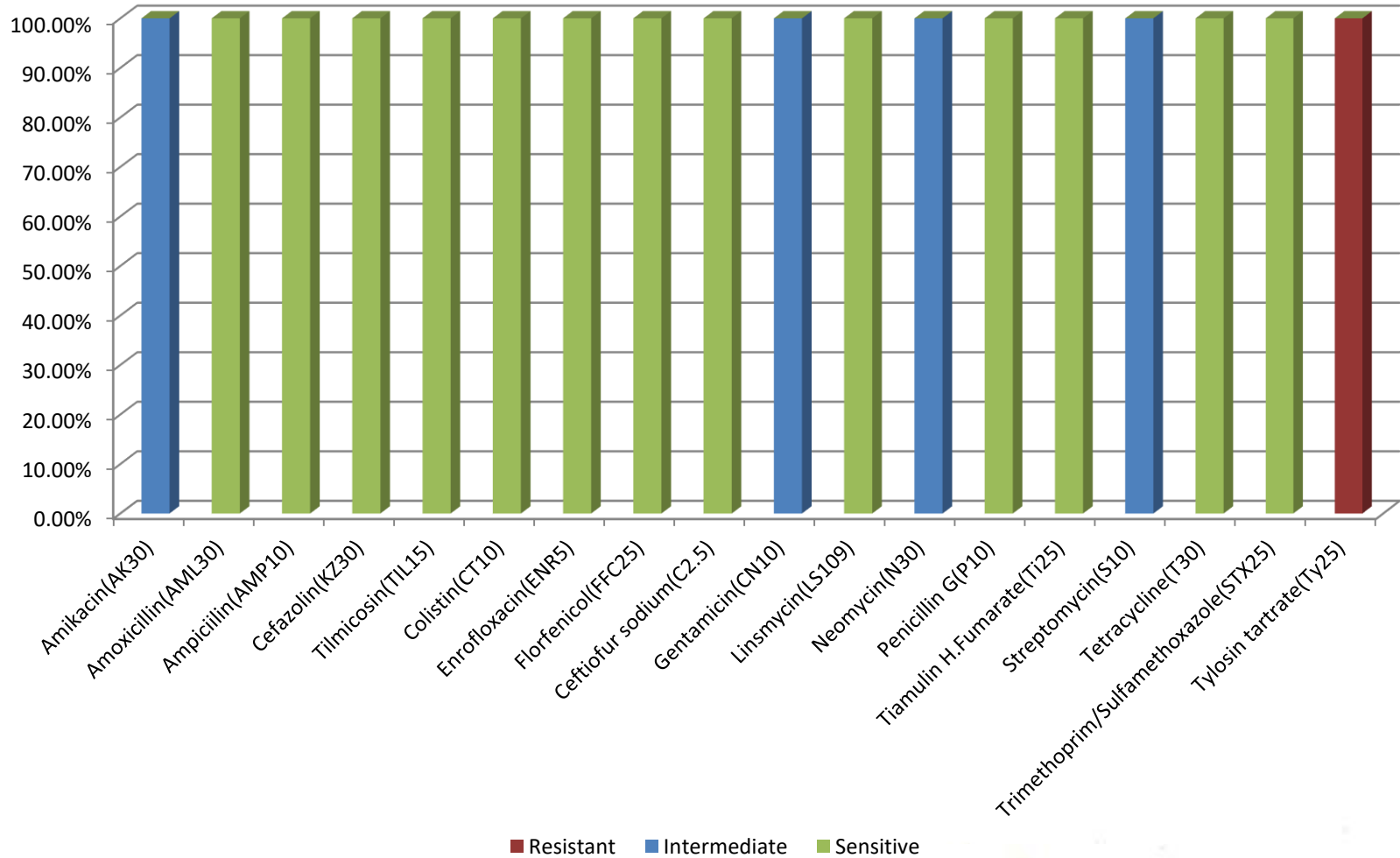
Actinobacillus pleuropneumoniae



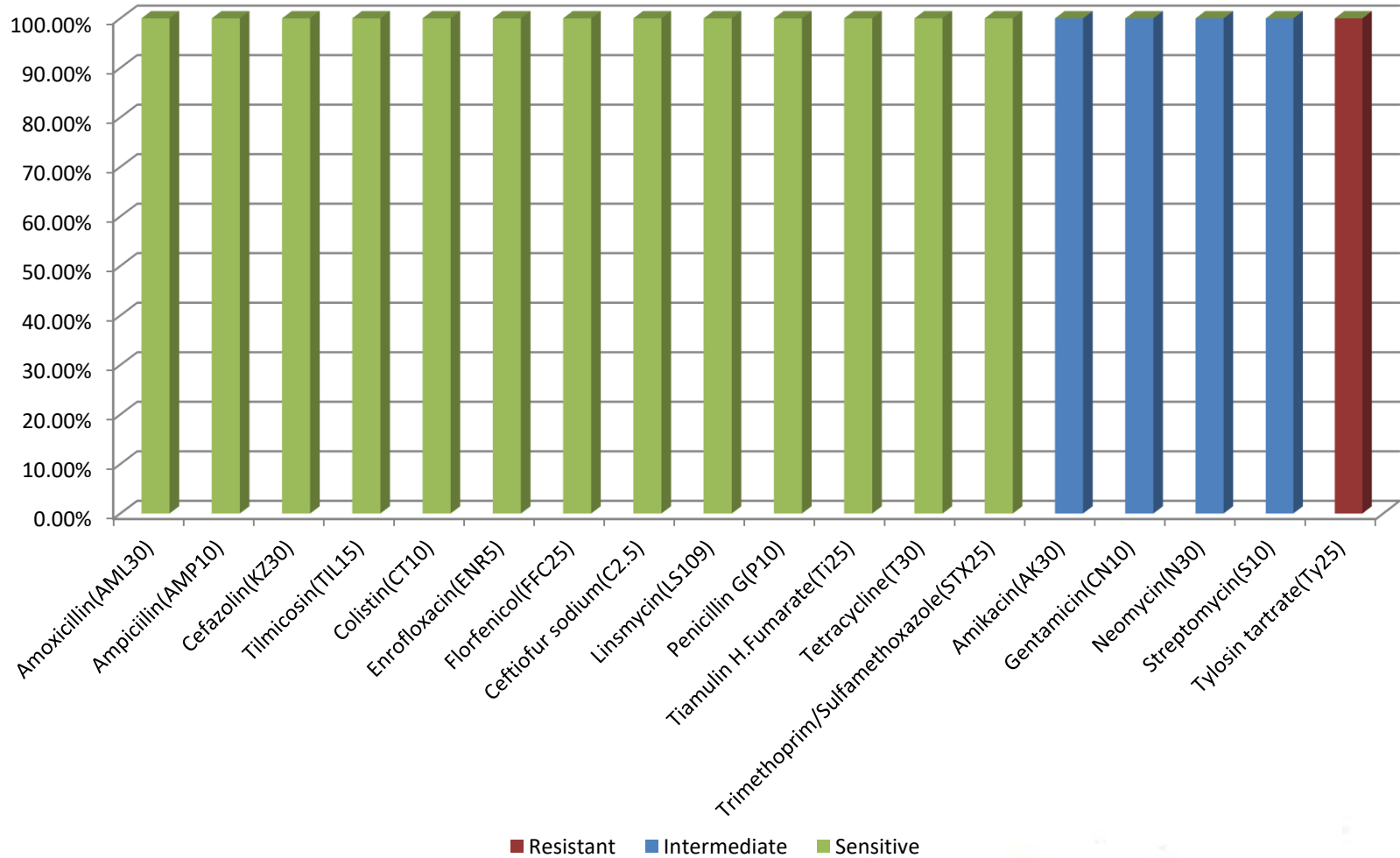
Actinobacillus suis

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	1	1	0	0.0%	1	100.0%	0	0.0%
Amoxicillin(AML30)			0	0.0%	0	0.0%	1	100.0%
Ampicillin(AMP10)			0	0.0%	0	0.0%	1	100.0%
Cefazolin(KZ30)			0	0.0%	0	0.0%	1	100.0%
Tilmicosin(TIL15)			0	0.0%	0	0.0%	1	100.0%
Colistin(CT10)			0	0.0%	0	0.0%	1	100.0%
Enrofloxacin(ENR5)			0	0.0%	0	0.0%	1	100.0%
Florphenicol(FFC25)			0	0.0%	0	0.0%	1	100.0%
Ceftiofur sodium(C2.5)			0	0.0%	0	0.0%	1	100.0%
Gentamicin(CN10)			0	0.0%	1	100.0%	0	0.0%
Linsmycin(LS109)			0	0.0%	0	0.0%	1	100.0%
Neomycin(N30)			0	0.0%	1	100.0%	0	0.0%
Penicillin G(P10)			0	0.0%	0	0.0%	1	100.0%
Tiamulin H.Fumarate(Ti25)			0	0.0%	0	0.0%	1	100.0%
Streptomycin(S10)			0	0.0%	1	100.0%	0	0.0%
Tetracycline(T30)			0	0.0%	0	0.0%	1	100.0%
Trimethoprim/ Sulfamethoxazole(STX25)			0	0.0%	0	0.0%	1	100.0%
Tylosin tartrate(Ty25)			1	100.0%	0	0.0%	0	0.0%

Actinobacillus suis



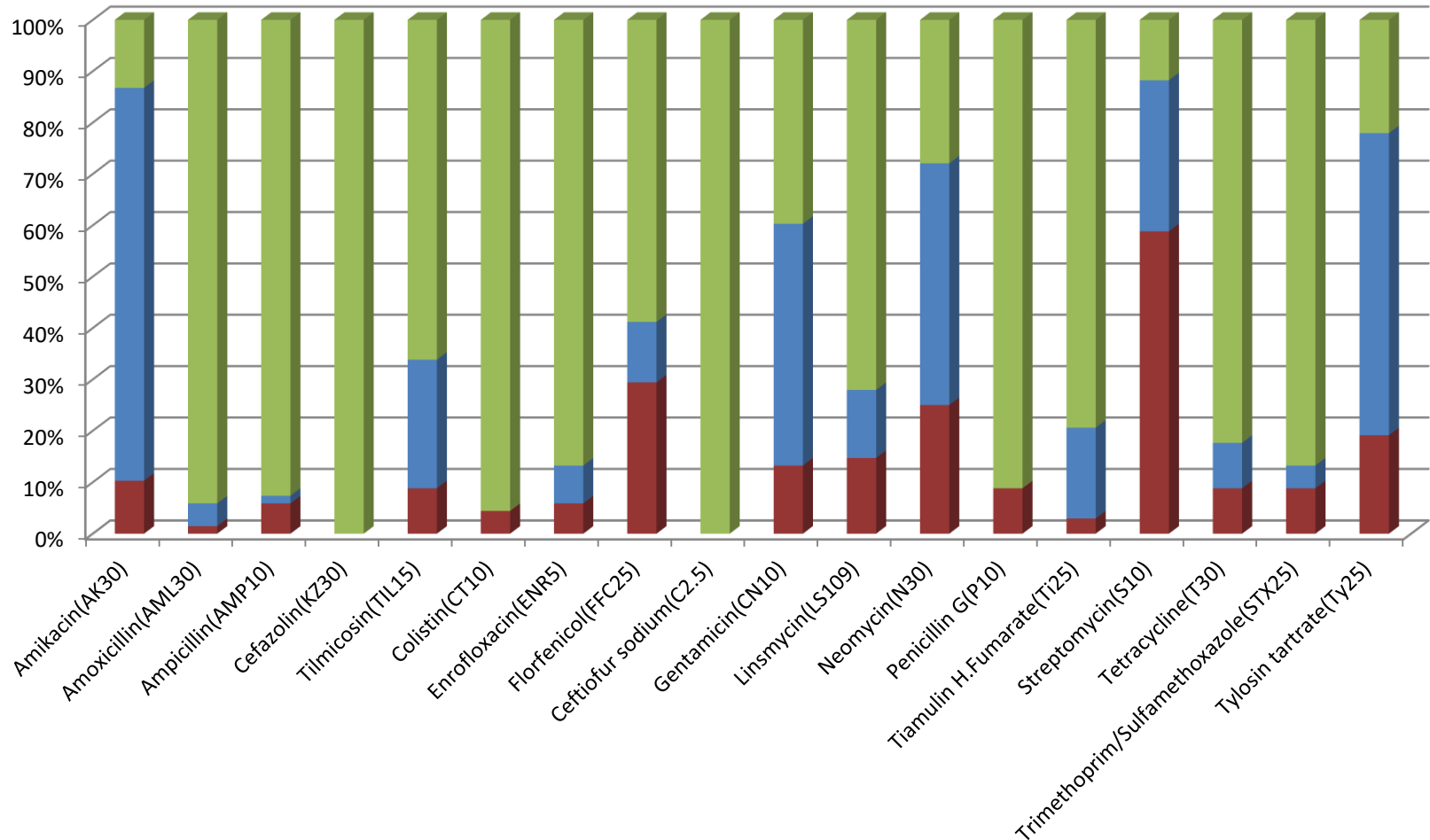
Actinobacillus suis



Pasteurella multocida

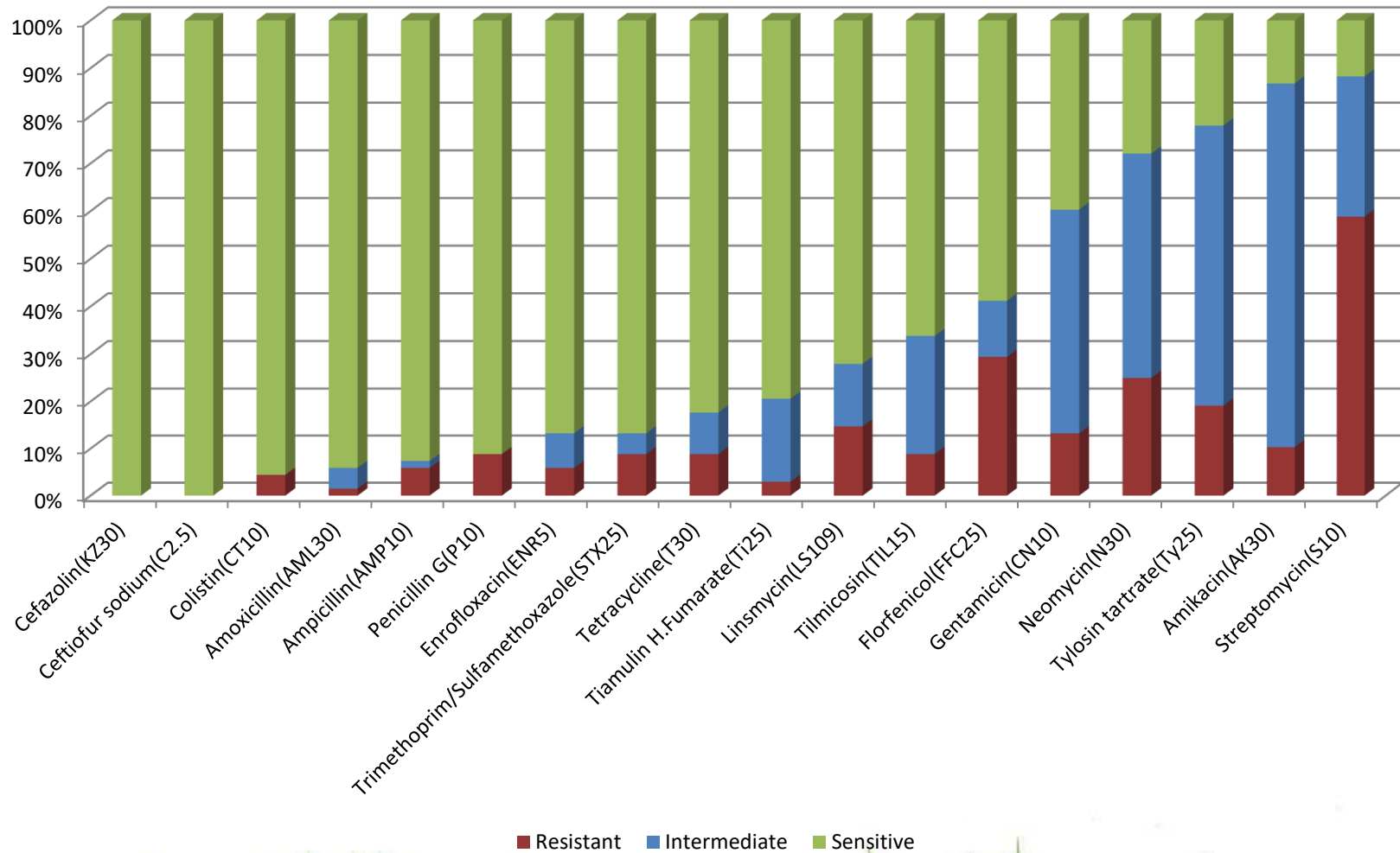
약 제 명	농장수	검 사 횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	54	68	7	10.3%	52	76.5%	9	13.2%
Amoxicillin(AML30)			1	1.5%	3	4.4%	64	94.1%
Ampicillin(AMP10)			4	5.9%	1	1.5%	63	92.6%
Cefazolin(KZ30)			0	0.0%	0	0.0%	68	100.0%
Tilmicosin(TIL15)			6	8.8%	17	25.0%	45	66.2%
Colistin(CT10)			3	4.4%	0	0.0%	65	95.6%
Enrofloxacin(ENR5)			4	5.9%	5	7.4%	59	86.8%
Florphenicol(FFC25)			20	29.4%	8	11.8%	40	58.8%
Ceftiofur sodium(C2.5)			0	0.0%	0	0.0%	68	100.0%
Gentamycin(CN10)			9	13.2%	32	47.1%	27	39.7%
Linsmycin(LS109)			10	14.7%	9	13.2%	49	72.1%
Neomycin(N30)			17	25.0%	32	47.1%	19	27.9%
Penicillin G(P10)			6	8.8%	0	0.0%	62	91.2%
Tiamulin H.Fumarate(Ti25)			2	2.9%	12	17.6%	54	79.4%
Streptomycin(S10)			40	58.8%	20	29.4%	8	11.8%
Tetracycline(T30)			6	8.8%	6	8.8%	56	82.4%
Trimethoprim/ Sulfamethoxazole(STX25)			6	8.8%	3	4.4%	59	86.8%
Tylosin tartrate(Ty25)			13	19.1%	40	58.8%	15	22.1%

Pasteurella multocida



■ Resistant ■ Intermediate ■ Sensitive

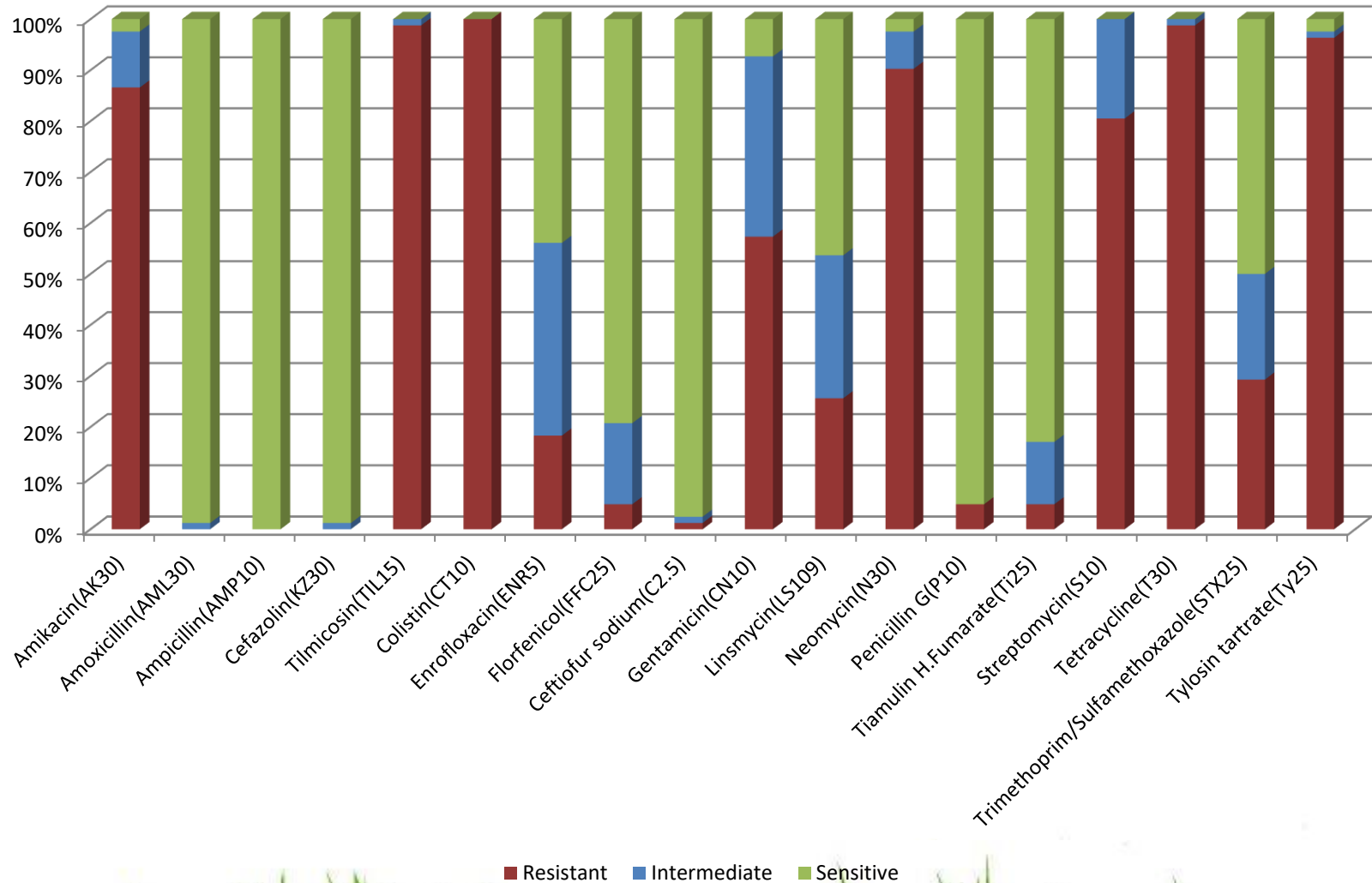
Pasteurella multocida



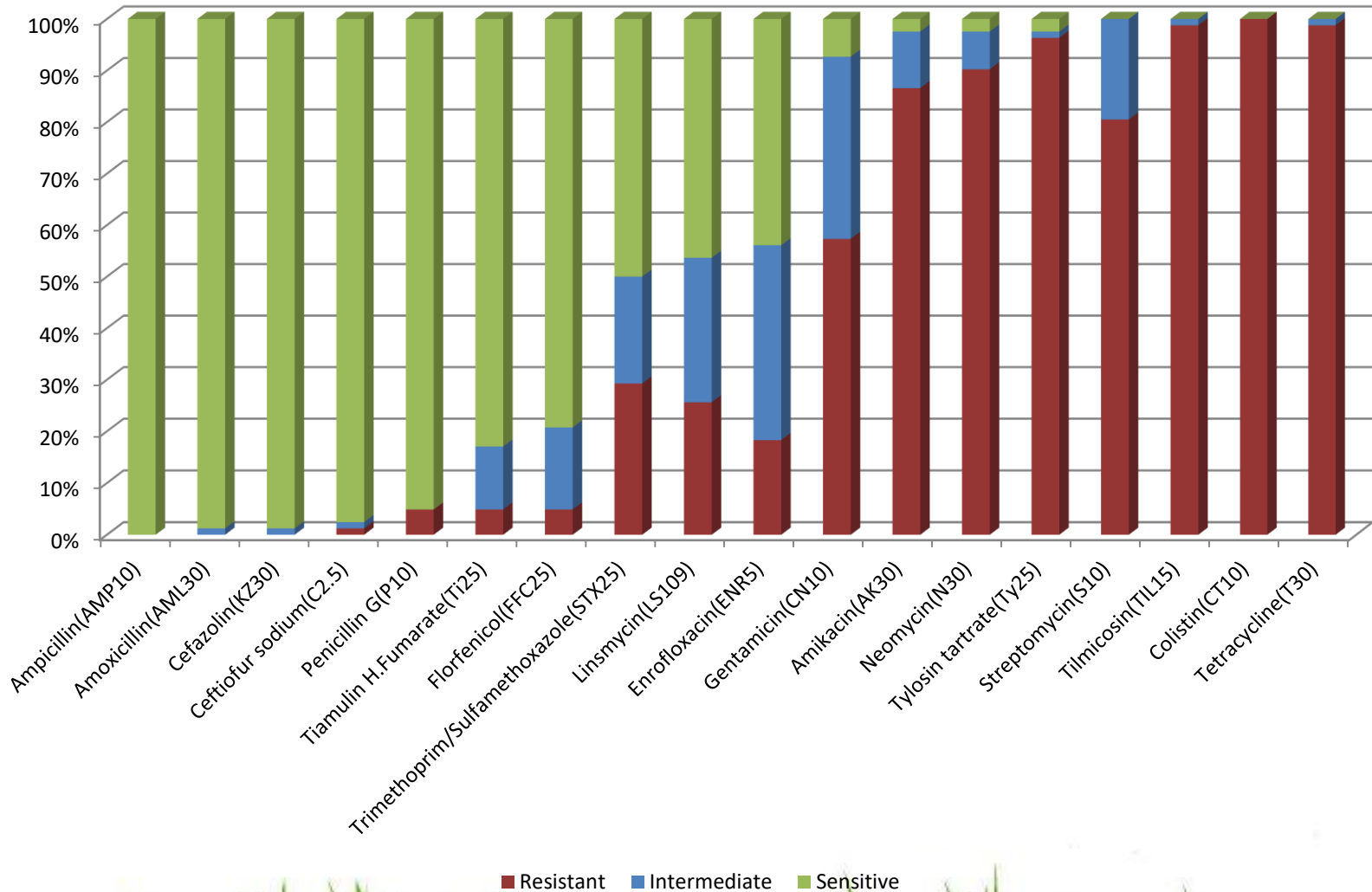
Streptococcus suis

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	65	82	71	86.6%	9	11.0%	2	2.4%
Amoxicillin(AML30)			0	0.0%	1	1.2%	81	98.8%
Ampicillin(AMP10)			0	0.0%	0	0.0%	82	100.0%
Cefazolin(KZ30)			0	0.0%	1	1.2%	81	98.8%
Tilmicosin(TIL15)			81	98.8%	1	1.2%	0	0.0%
Colistin(CT10)			82	100.0%	0	0.0%	0	0.0%
Enrofloxacin(ENR5)			15	18.3%	31	37.8%	36	43.9%
Florphenicol(FFC25)			4	4.9%	13	15.9%	65	79.3%
Ceftiofur sodium(C2.5)			1	1.2%	1	1.2%	80	97.6%
Gentamycin(CN10)			47	57.3%	29	35.4%	6	7.3%
Linsmycin(LS109)			21	25.6%	23	28.0%	38	46.3%
Neomycin(N30)			74	90.2%	6	7.3%	2	2.4%
Penicillin G(P10)			4	4.9%	0	0.0%	78	95.1%
Tiamulin H.Fumarate(Ti25)			4	4.9%	10	12.2%	68	82.9%
Streptomycin(S10)			66	80.5%	16	19.5%	0	0.0%
Tetracycline(T30)			81	98.8%	1	1.2%	0	0.0%
Trimethoprim/ Sulfamethoxazole(STX25)			24	29.3%	17	20.7%	41	50.0%
Tylosin tartrate(Ty25)			79	96.3%	1	1.2%	2	2.4%

Streptococcus suis



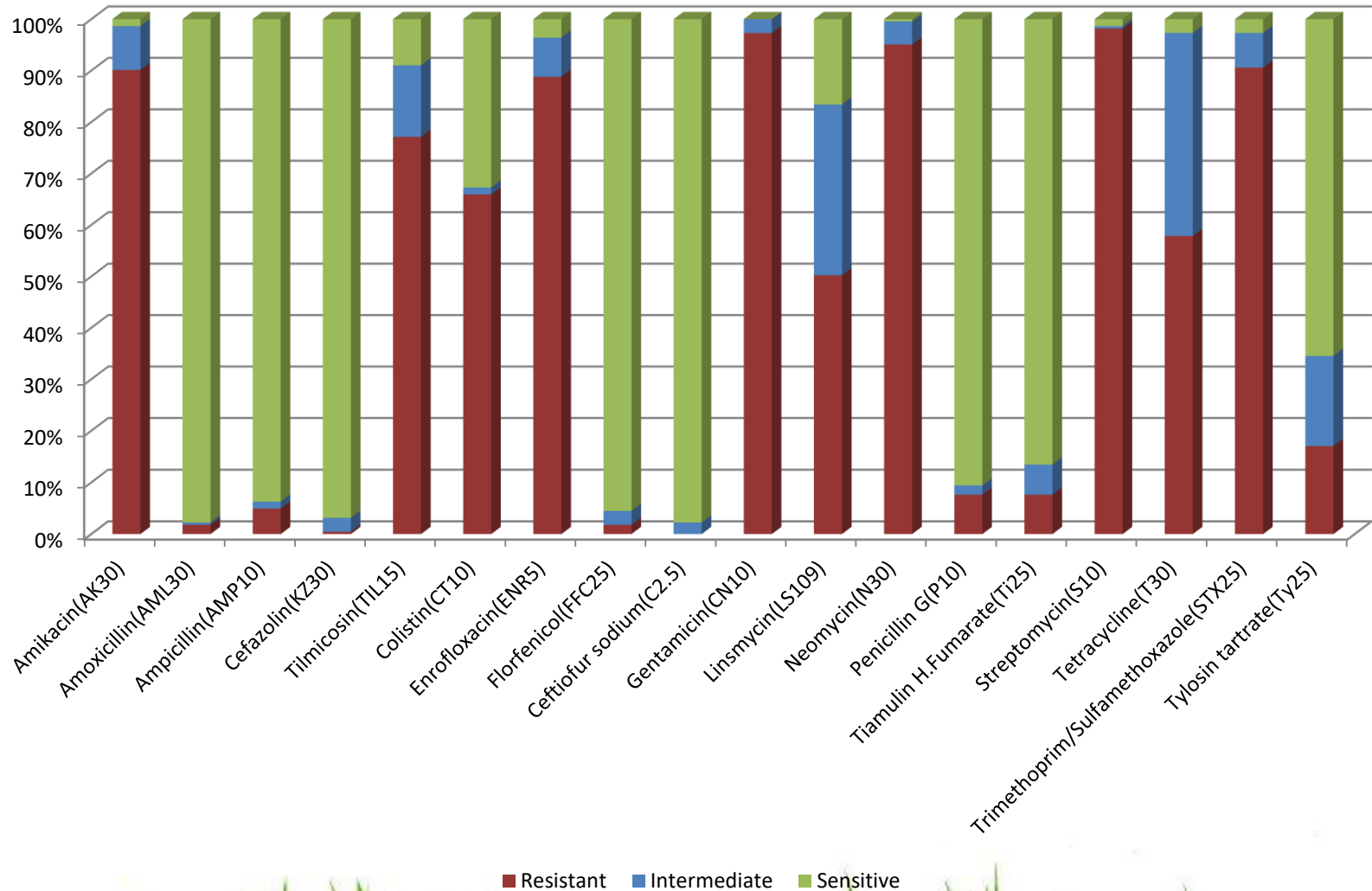
Streptococcus suis



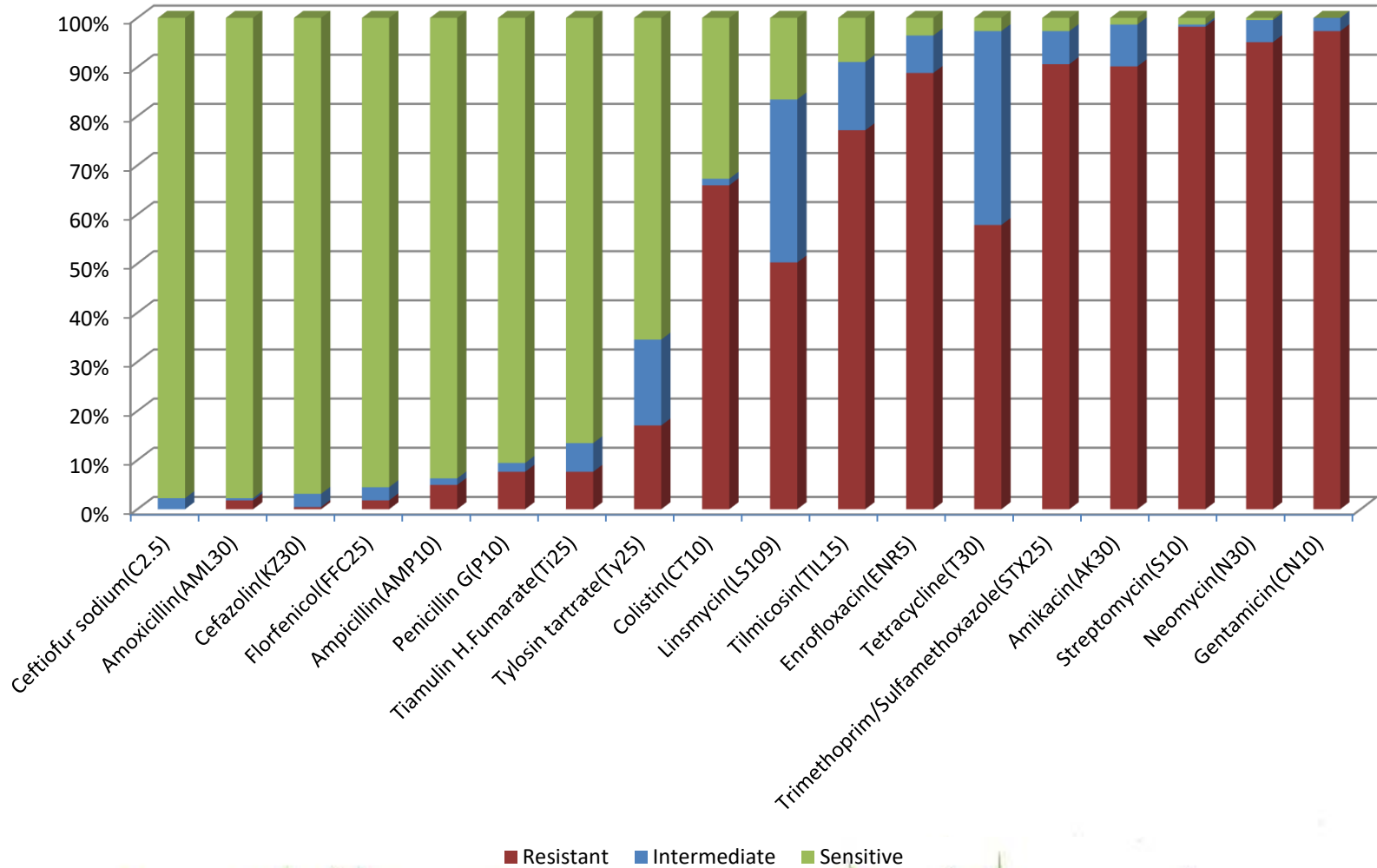
Clostridium perfringens

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	112	223	201	90.1%	19	8.5%	3	1.3%
Amoxicillin(AML30)			4	1.8%	1	0.4%	218	97.8%
Ampicillin(AMP10)			11	4.9%	3	1.3%	209	93.7%
Cefazolin(KZ30)			1	0.4%	6	2.7%	216	96.9%
Tilmicosin(TIL15)			172	77.1%	31	13.9%	20	9.0%
Colistin(CT10)			147	65.9%	3	1.3%	73	32.7%
Enrofloxacin(ENR5)			198	88.8%	17	7.6%	8	3.6%
Florphenicol(FFC25)			4	1.8%	6	2.7%	213	95.5%
Ceftiofur sodium(C2.5)			0	0.0%	5	2.2%	218	97.8%
Gentamycin(CN10)			217	97.3%	6	2.7%	0	0.0%
Linsmycin(LS109)			112	50.2%	74	33.2%	37	16.6%
Neomycin(N30)			212	95.1%	10	4.5%	1	0.4%
Penicillin G(P10)			17	7.6%	4	1.8%	202	90.6%
Tiamulin H.Fumarate(Ti25)			17	7.6%	13	5.8%	193	86.5%
Streptomycin(S10)			219	98.2%	1	0.4%	3	1.3%
Tetracycline(T30)			129	57.8%	88	39.5%	6	2.7%
Trimethoprim/ Sulfamethoxazole(STX25)			202	90.6%	15	6.7%	6	2.7%
Tylosin tartrate(Ty25)			38	17.0%	39	17.5%	146	65.5%

Clostridium perfringens



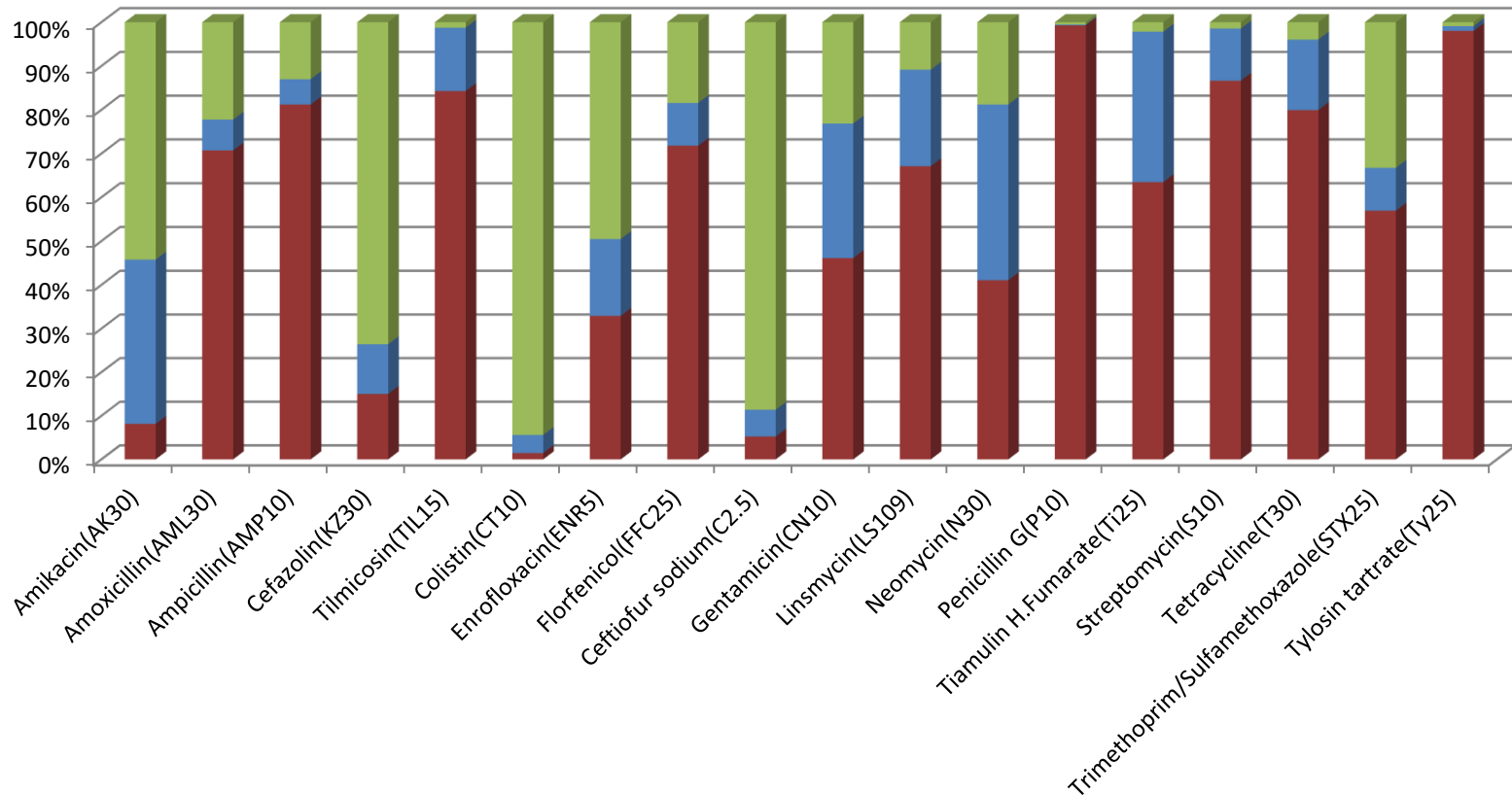
Clostridium perfringens



Escherichia coli

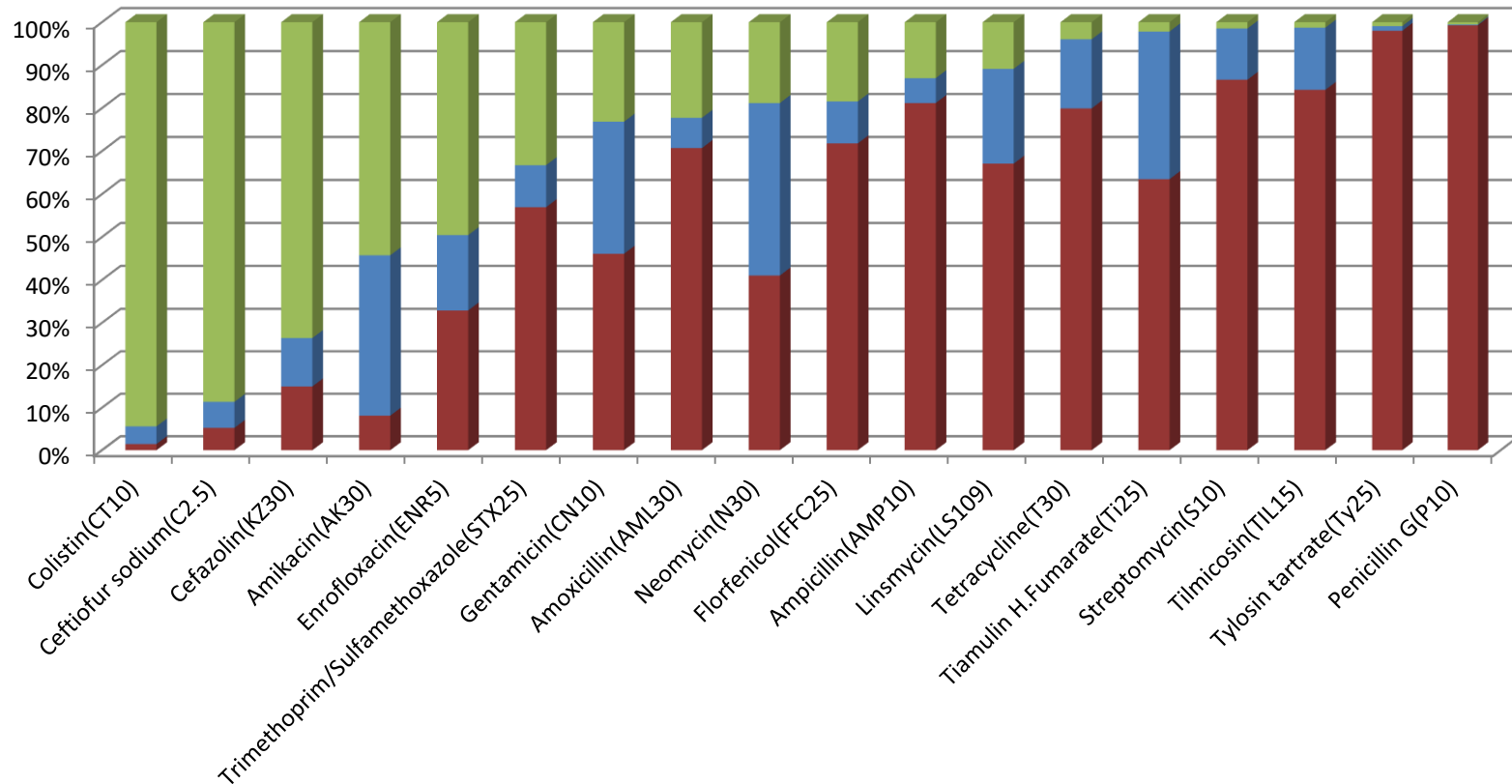
약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	316	553	45	8.1%	208	37.6%	300	54.2%
Amoxicillin(AML30)			391	70.7%	39	7.1%	123	22.2%
Ampicillin(AMP10)			449	81.2%	32	5.8%	72	13.0%
Cefazolin(KZ30)			83	15.0%	63	11.4%	407	73.6%
Tilmicosin(TIL15)			466	84.3%	80	14.5%	7	1.3%
Colistin(CT10)			8	1.4%	23	4.2%	522	94.4%
Enrofloxacin(ENR5)			182	32.9%	97	17.5%	274	49.5%
Florphenicol(FFC25)			397	71.8%	54	9.8%	102	18.4%
Ceftiofur sodium(C2.5)			29	5.2%	34	6.1%	490	88.6%
Gentamycin(CN10)			255	46.1%	170	30.7%	128	23.1%
Linsmycin(LS109)			371	67.1%	122	22.1%	60	10.8%
Neomycin(N30)			227	41.0%	222	40.1%	104	18.8%
Penicillin G(P10)			549	99.3%	1	0.2%	3	0.5%
Tiamulin H.Fumarate(Ti25)			351	63.5%	190	34.4%	12	2.2%
Streptomycin(S10)			479	86.6%	66	11.9%	8	1.4%
Tetracycline(T30)			442	79.9%	89	16.1%	22	4.0%
Trimethoprim/ Sulfamethoxazole(STX25)			315	57.0%	54	9.8%	184	33.3%
Tylosin tartrate(Ty25)			542	98.0%	6	1.1%	5	0.9%

Escherichia coli



■ Resistant ■ Intermediate ■ Sensitive

Escherichia coli

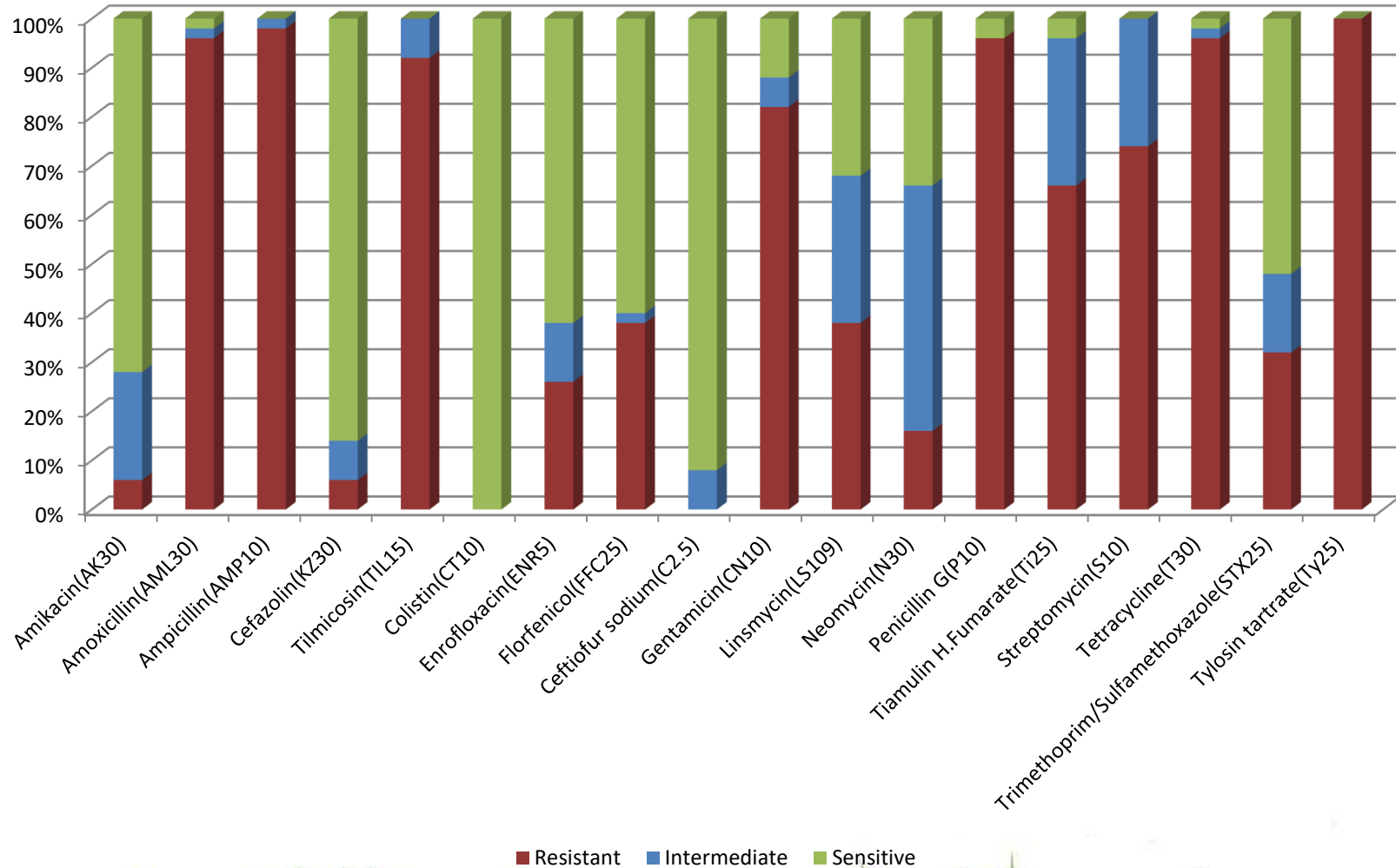


■ 계열1 ■ 계열2 ■ 계열3

Salmonella spp.(serogroup B)

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	31	50	3	6.0%	11	22.0%	36	72.0%
Amoxicillin(AML30)			48	96.0%	1	2.0%	1	2.0%
Ampicillin(AMP10)			49	98.0%	1	2.0%	0	0.0%
Cefazolin(KZ30)			3	6.0%	4	8.0%	43	86.0%
Tilmicosin(TIL15)			46	92.0%	4	8.0%	0	0.0%
Colistin(CT10)			0	0.0%	0	0.0%	50	100.0%
Enrofloxacin(ENR5)			13	26.0%	6	12.0%	31	62.0%
Florfenicol(FFC25)			19	38.0%	1	2.0%	30	60.0%
Ceftiofur sodium(C2.5)			0	0.0%	4	8.0%	46	92.0%
Gentamicin(CN10)			41	82.0%	3	6.0%	6	12.0%
Linsmycin(LS109)			19	38.0%	15	30.0%	16	32.0%
Neomycin(N30)			8	16.0%	25	50.0%	17	34.0%
Penicillin G(P10)			48	96.0%	0	0.0%	2	4.0%
Tiamulin H.Fumarate(Ti25)			33	66.0%	15	30.0%	2	4.0%
Streptomycin(S10)			37	74.0%	13	26.0%	0	0.0%
Tetracycline(T30)			48	96.0%	1	2.0%	1	2.0%
Trimethoprim/Sulfamethoxazole(STX 25)			16	32.0%	8	16.0%	26	52.0%
Tylosin tartrate(Ty25)			50	100.0%	0	0.0%	0	0.0%

Salmonella spp.(serogroup B)



Salmonella spp.(serogroup B)

