



옵티팜
OPTIPHARM

2016년 양돈 질병 세균 항생제 내성 검사 결과

I Seul Oh
ACE of Optipharm
ois@optipharm.co.kr
043-249-7532

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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

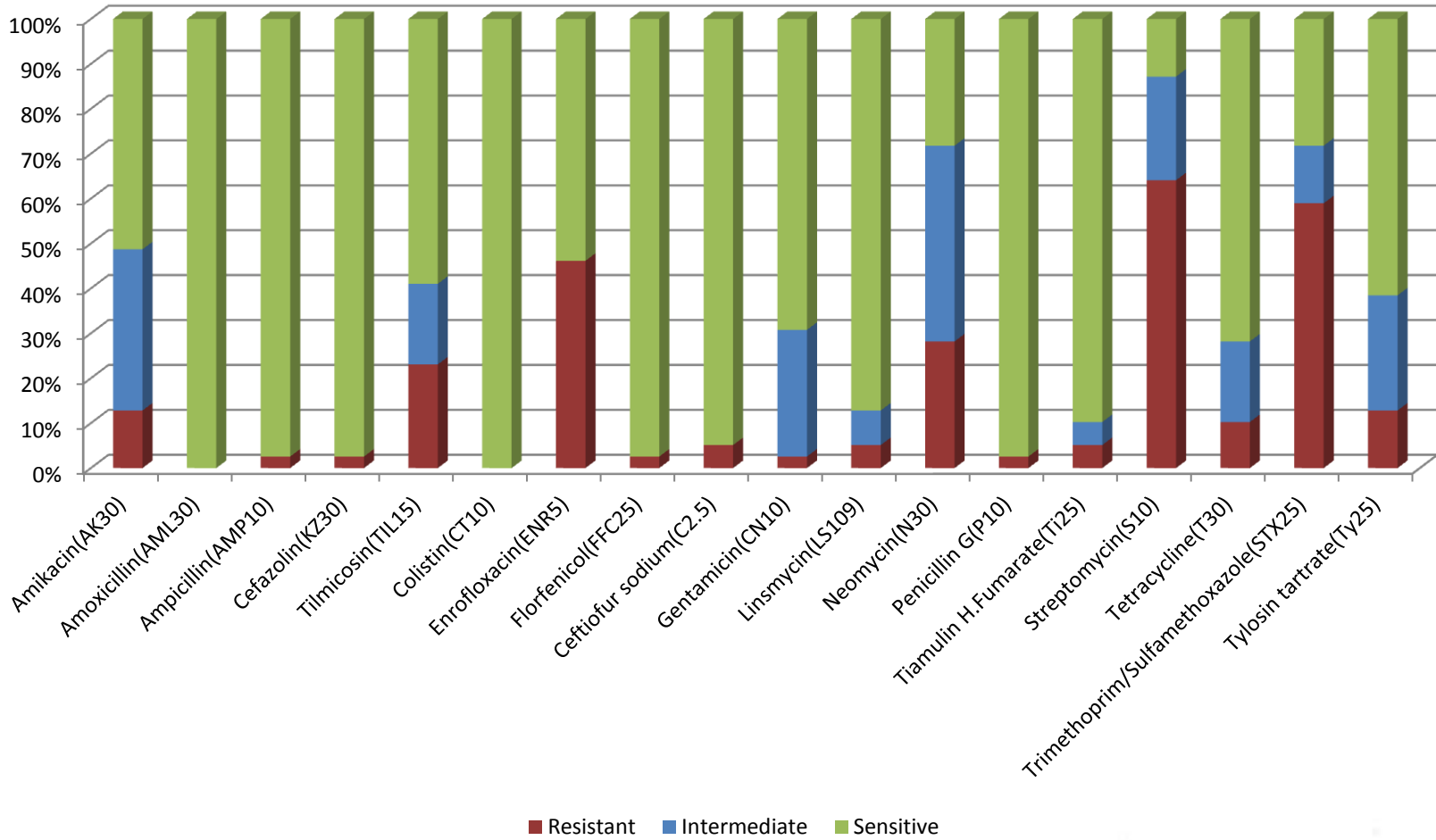
Sensitive(감수성)	감수성이 있다는 의미로 치료 효과를 기대할 수 있음.
Resistant(내성)	내성이 있다는 의미로 치료효과 없음.
Intermediate(효과 중간)	감수성과 내성의 중간 정도.

2. 호흡기 질병 5종 소화기 질병 3종

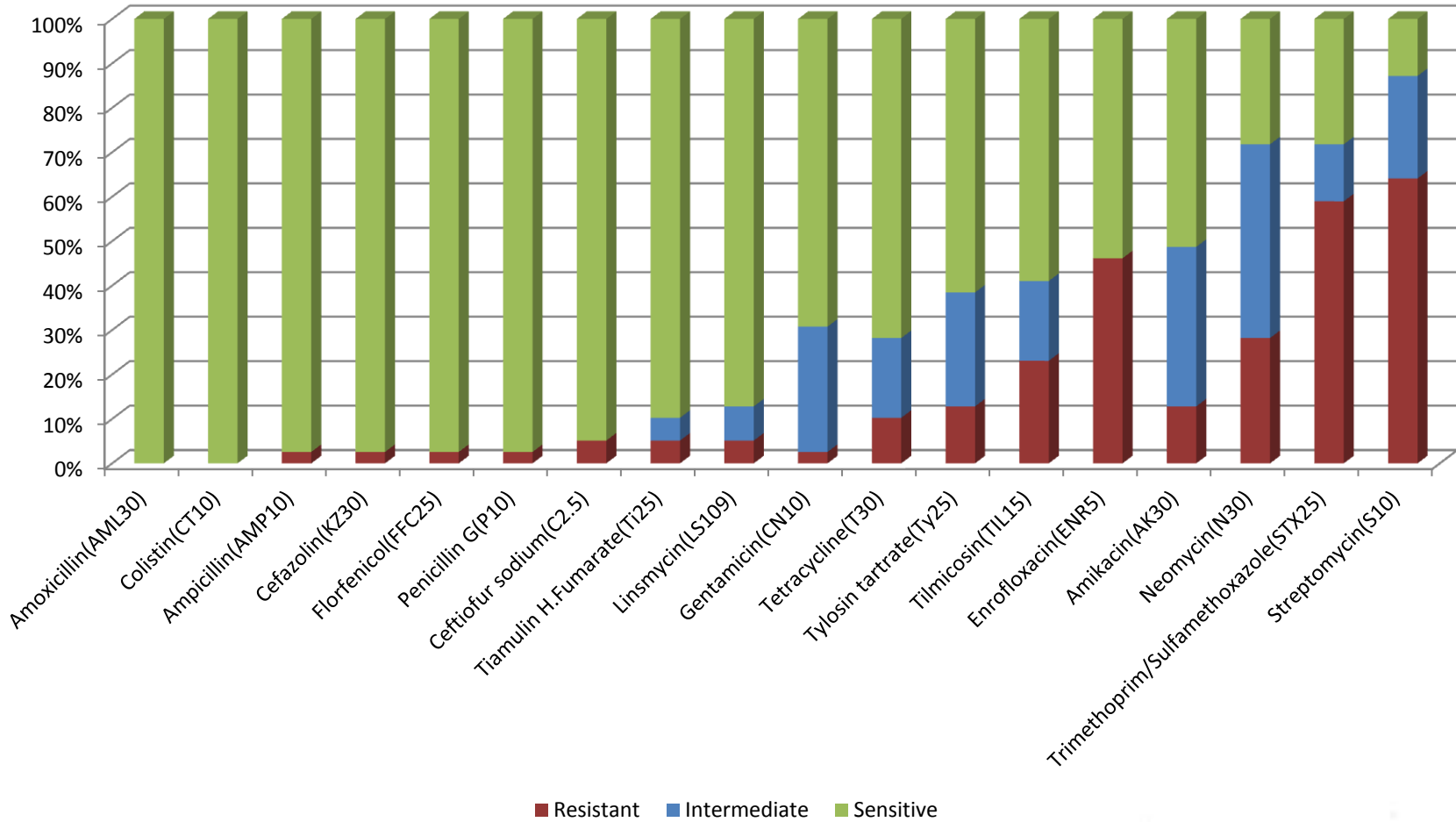
Haemophilus parasuis

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	27	39	5	12.8%	14	35.9%	20	51.3%
Amoxicillin(AML30)			0	0.0%	0	0.0%	39	100.0%
Ampicillin(AMP10)			1	2.6%	0	0.0%	38	97.4%
Cefazolin(KZ30)			1	2.6%	0	0.0%	38	97.4%
Tilmicosin(TIL15)			9	23.1%	7	17.9%	23	59.0%
Colistin(CT10)			0	0.0%	0	0.0%	39	100.0%
Enrofloxacin(ENR5)			18	46.2%	0	0.0%	21	53.8%
Florphenicol(FFC25)			1	2.6%	0	0.0%	38	97.4%
Ceftiofur sodium(C2.5)			2	5.1%	0	0.0%	37	94.9%
Gentamycin(CN10)			1	2.6%	11	28.2%	27	69.2%
Linsmycin(LS109)			2	5.1%	3	7.7%	34	87.2%
Neomycin(N30)			11	28.2%	17	43.6%	11	28.2%
Penicillin G(P10)			1	2.6%	0	0.0%	38	97.4%
Tiamulin H.Fumarate(Ti25)			2	5.1%	2	5.1%	35	89.7%
Streptomycin(S10)			25	64.1%	9	23.1%	5	12.8%
Tetracycline(T30)			4	10.3%	7	17.9%	28	71.8%
Trimethoprim/ Sulfamethoxazole(STX25)			23	59.0%	5	12.8%	11	28.2%
Tylosin tartrate(Ty25)	5	12.8%	10	25.6%	24	61.5%		

Haemophilus parasuis



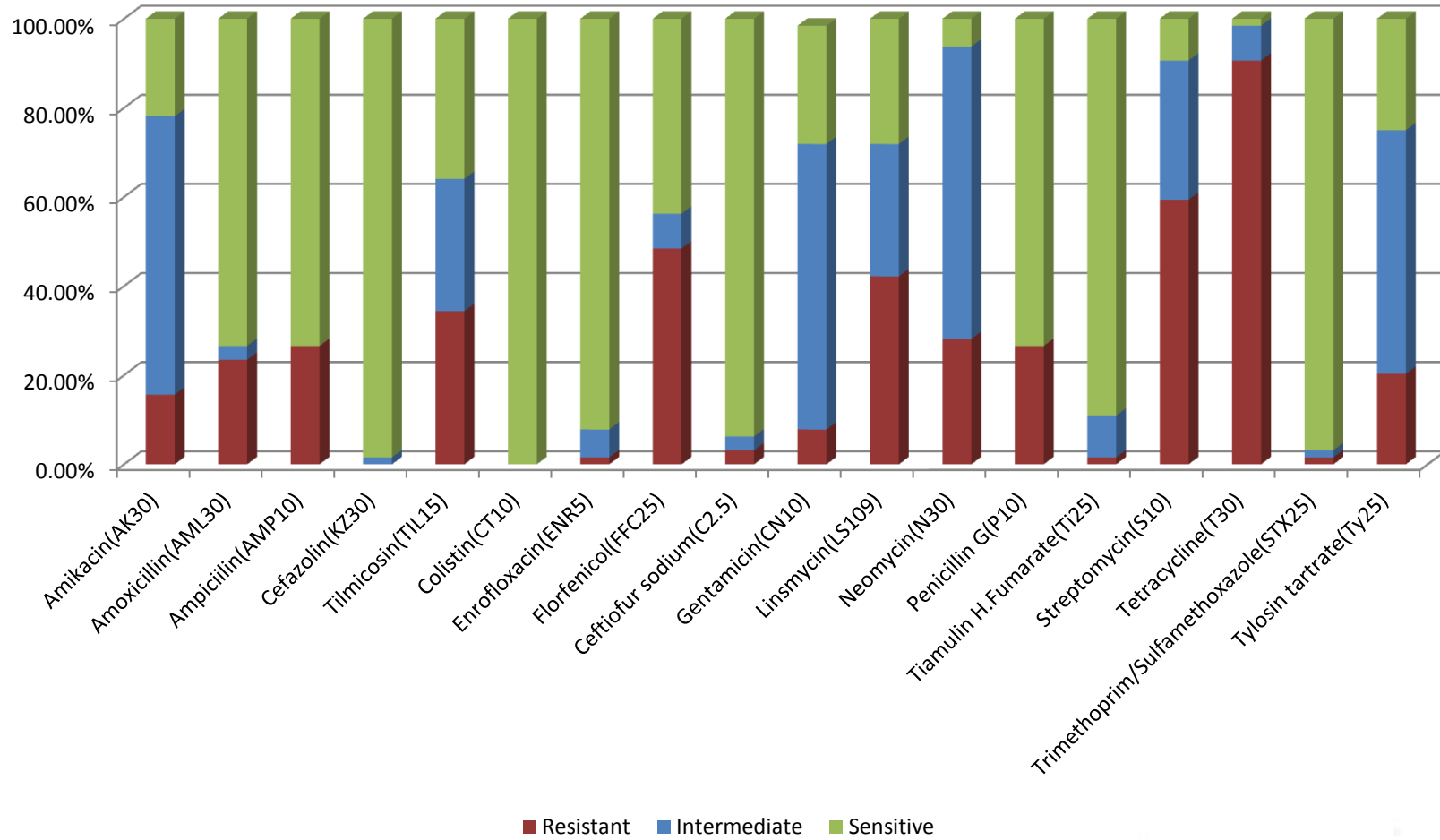
Haemophilus parasuis



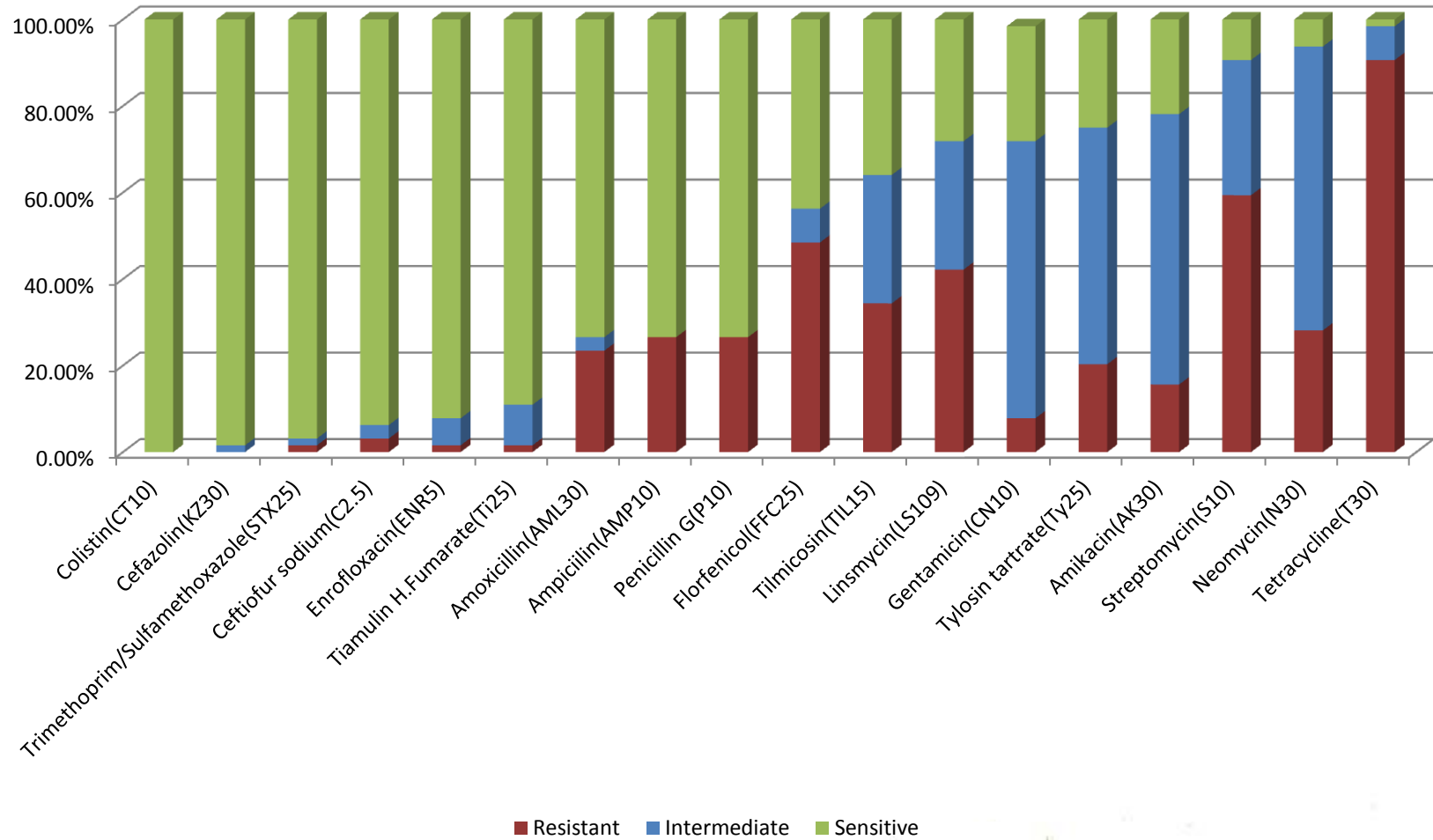
Actinobacillus pleuropneumoniae

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	39	64	10	15.6%	40	62.5%	14	21.9%
Amoxicillin(AML30)			15	23.4%	2	3.1%	47	73.4%
Ampicillin(AMP10)			17	26.6%	0	0.0%	47	73.4%
Cefazolin(KZ30)			0	0.0%	1	1.6%	63	98.4%
Tilmicosin(TIL15)			22	34.4%	19	29.7%	23	35.9%
Colistin(CT10)			0	0.0%	0	0.0%	64	100.0%
Enrofloxacin(ENR5)			1	1.6%	4	6.3%	59	92.2%
Florphenicol(FFC25)			31	48.4%	5	7.8%	28	43.8%
Ceftiofur sodium(C2.5)			2	3.1%	2	3.1%	60	93.8%
Gentamicin(CN10)			5	7.8%	41	64.1%	18	28.1%
Linsmycin(LS109)			27	42.2%	19	29.7%	18	28.1%
Neomycin(N30)			18	28.1%	42	65.6%	4	6.3%
Penicillin G(P10)			17	26.6%	0	0.0%	47	73.4%
Tiamulin H.Fumarate(Ti25)			1	1.6%	6	9.4%	57	89.1%
Streptomycin(S10)			38	59.4%	20	31.3%	6	9.4%
Tetracycline(T30)			58	90.6%	5	7.8%	1	1.6%
Trimethoprim/ Sulfamethoxazole(STX25)			1	1.6%	1	1.6%	62	96.9%
Tylosin tartrate(Ty25)	13	20.3%	35	54.7%	16	25.0%		

Actinobacillus pleuropneumoniae



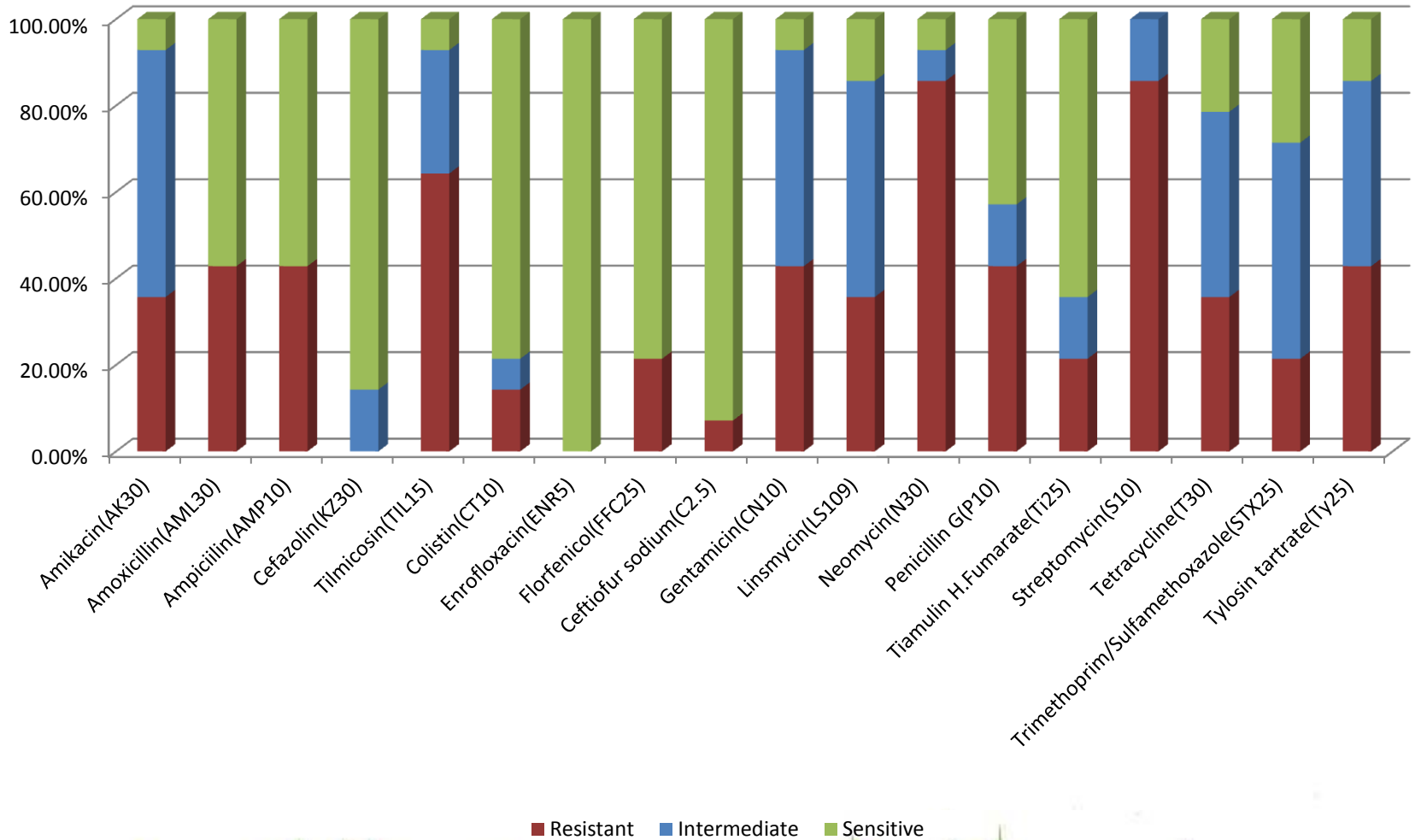
Actinobacillus pleuropneumoniae



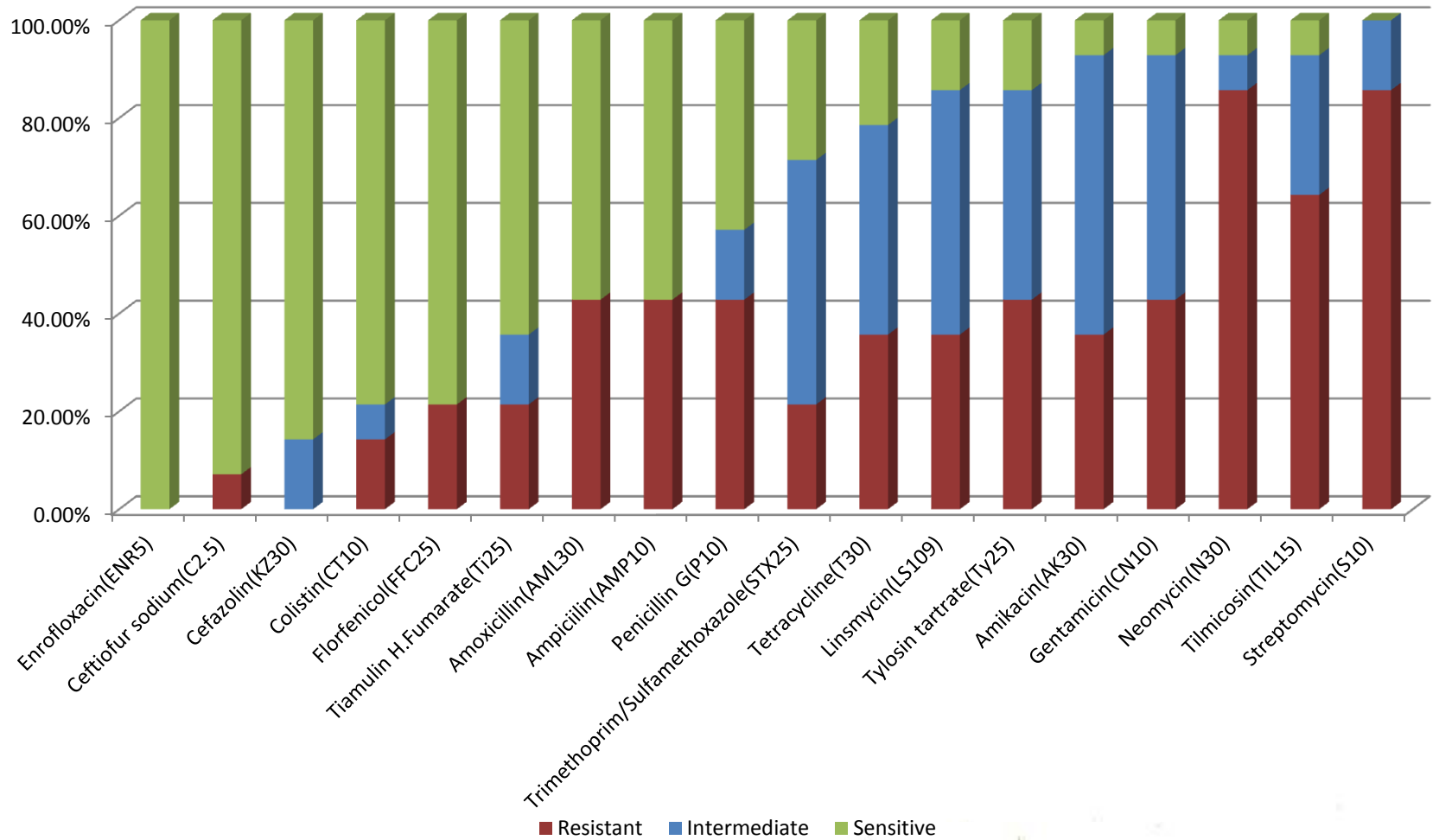
Actinobacillus suis

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



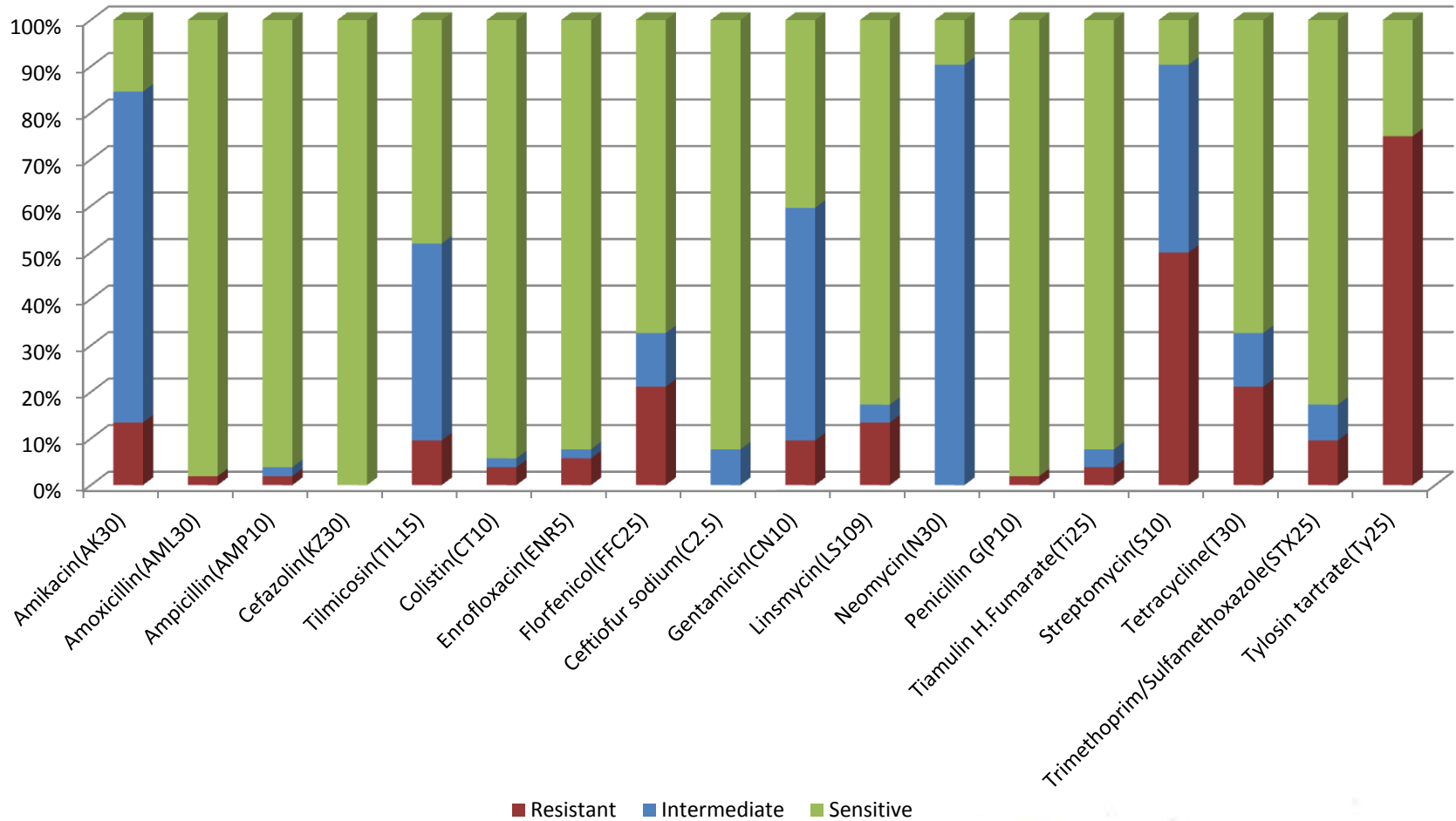
Actinobacillus suis



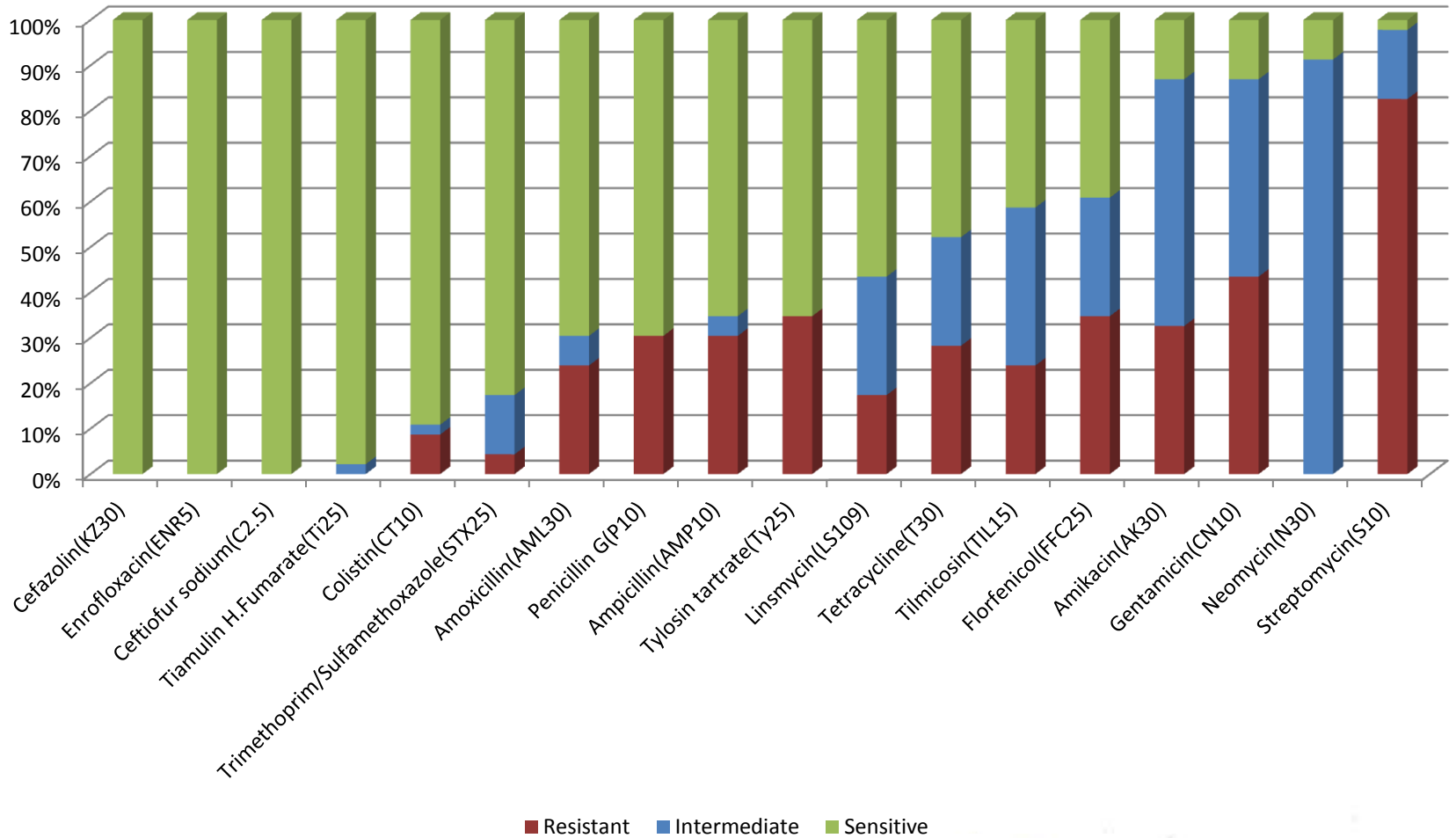
Pasteurella multocida

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



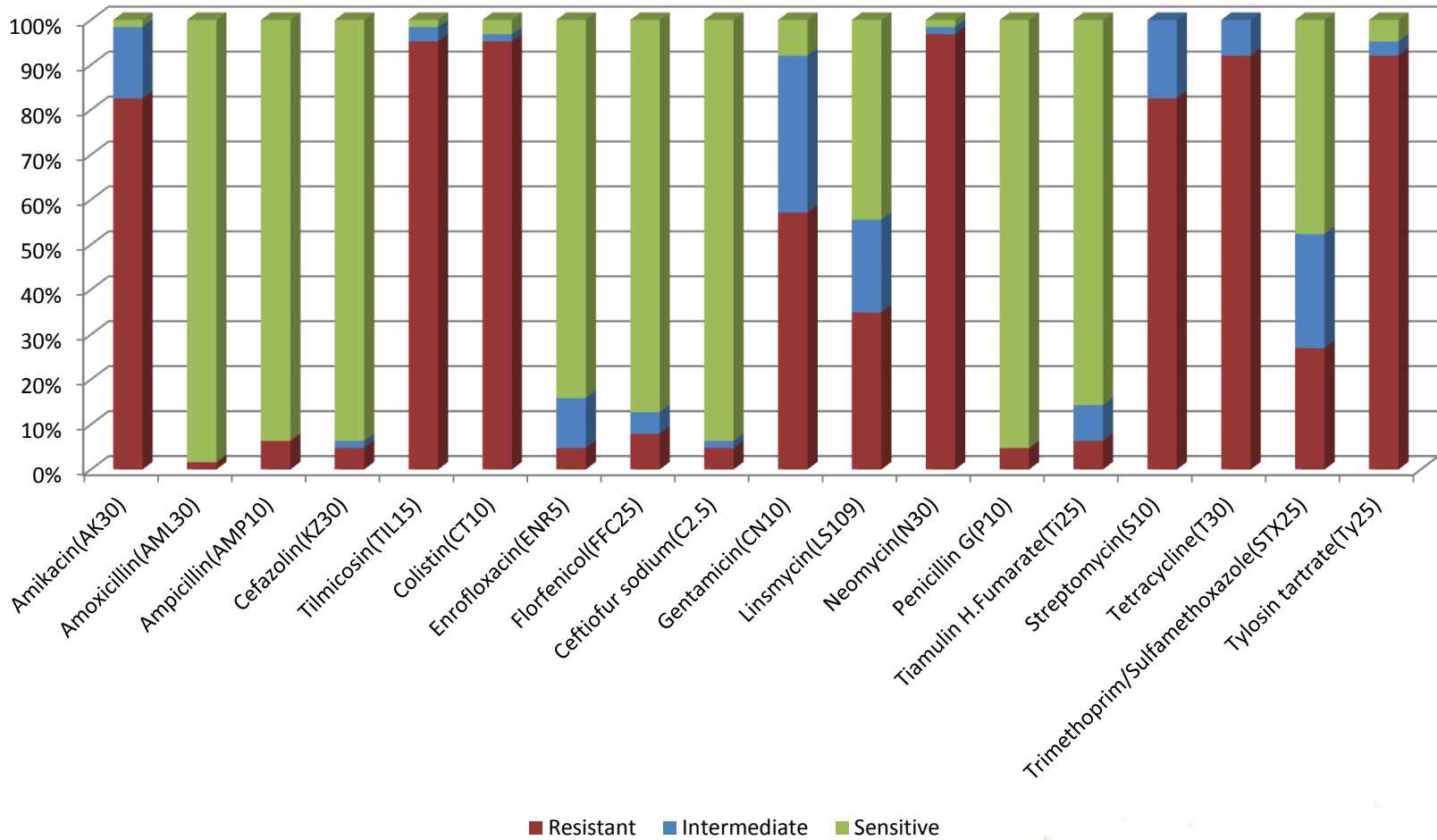
Pasteurella multocida



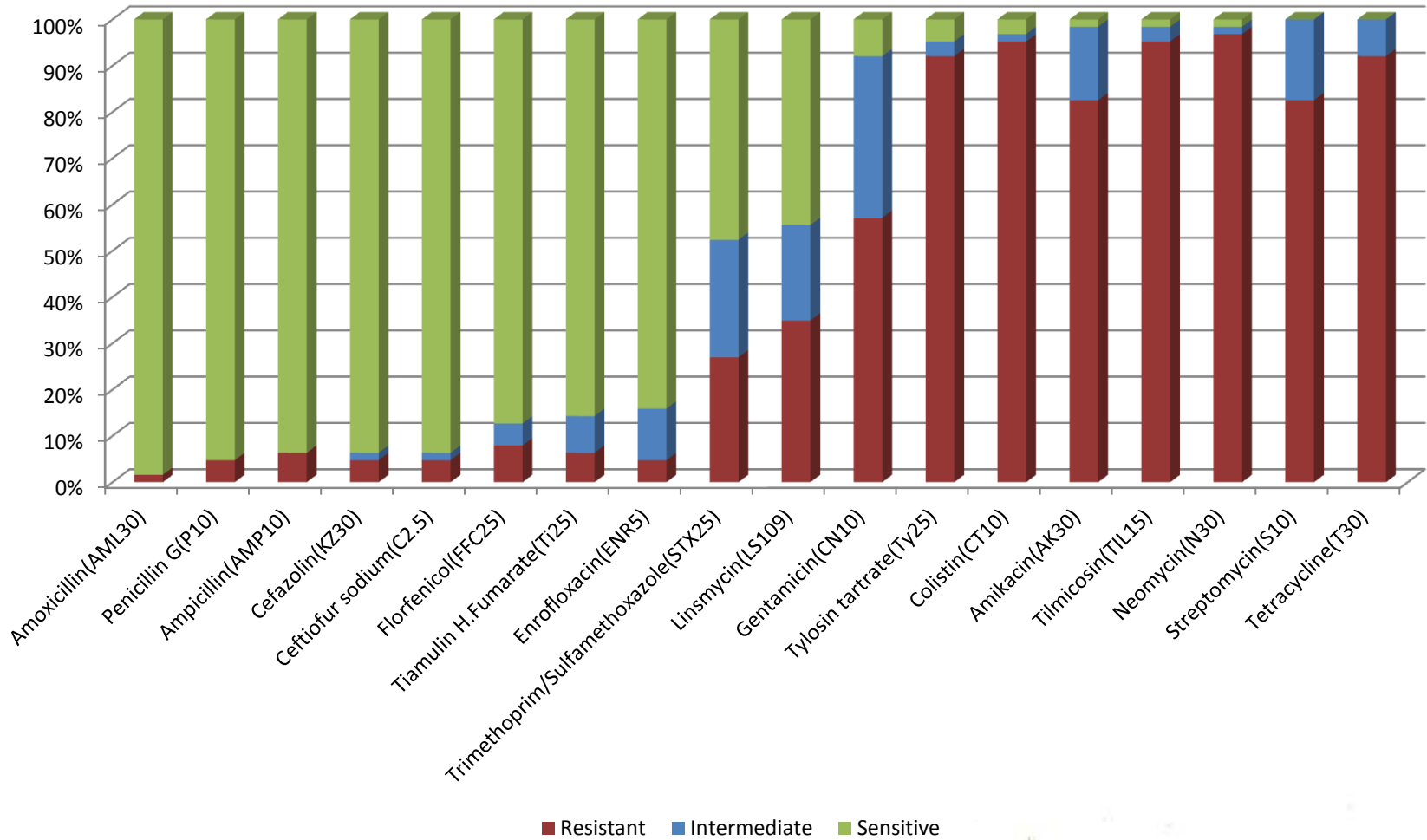
Streptococcus suis

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	46	63	52	82.5%	10	15.9%	1	1.6%
Amoxicillin(AML30)			1	1.6%	0	0.0%	62	98.4%
Ampicillin(AMP10)			4	6.3%	0	0.0%	59	93.7%
Cefazolin(KZ30)			3	4.8%	1	1.6%	59	93.7%
Tilmicosin(TIL15)			60	95.2%	2	3.2%	1	1.6%
Colistin(CT10)			60	95.2%	1	1.6%	2	3.2%
Enrofloxacin(ENR5)			3	4.8%	7	11.1%	53	84.1%
Florphenicol(FFC25)			5	7.9%	3	4.8%	55	87.3%
Ceftiofur sodium(C2.5)			3	4.8%	1	1.6%	59	93.7%
Gentamycin(CN10)			36	57.1%	22	34.9%	5	7.9%
Linsmycin(LS109)			22	34.9%	13	20.6%	28	44.4%
Neomycin(N30)			61	96.8%	1	1.6%	1	1.6%
Penicillin G(P10)			3	4.8%	0	0.0%	60	95.2%
Tiamulin H.Fumarate(Ti25)			4	6.3%	5	7.9%	54	85.7%
Streptomycin(S10)			52	82.5%	11	17.5%	0	0.0%
Tetracycline(T30)			58	92.1%	5	7.9%	0	0.0%
Trimethoprim/ Sulfamethoxazole(STX25)			17	27.0%	16	25.4%	30	47.6%
Tylosin tartrate(Ty25)	58	92.1%	2	3.2%	3	4.8%		

Streptococcus suis



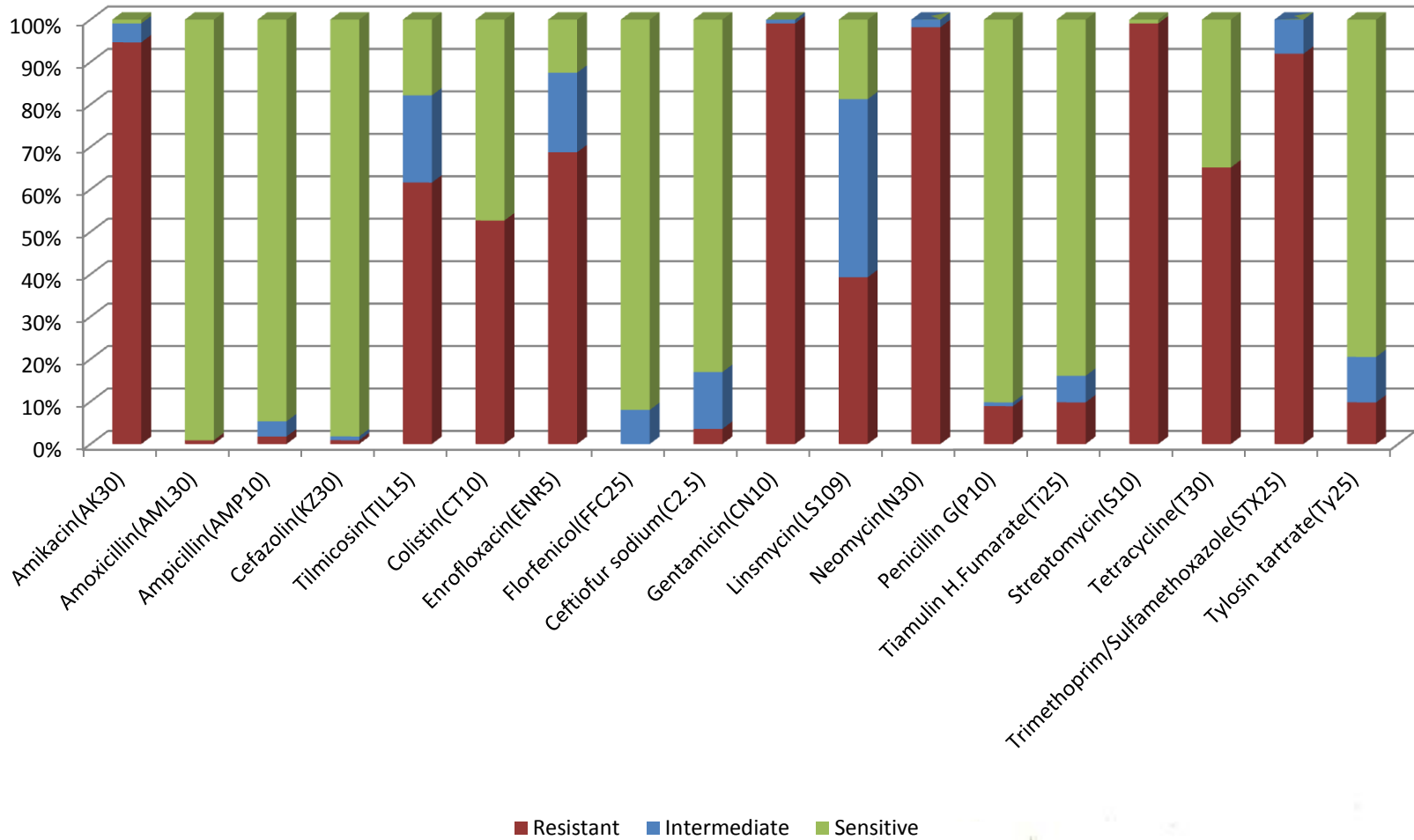
Streptococcus suis



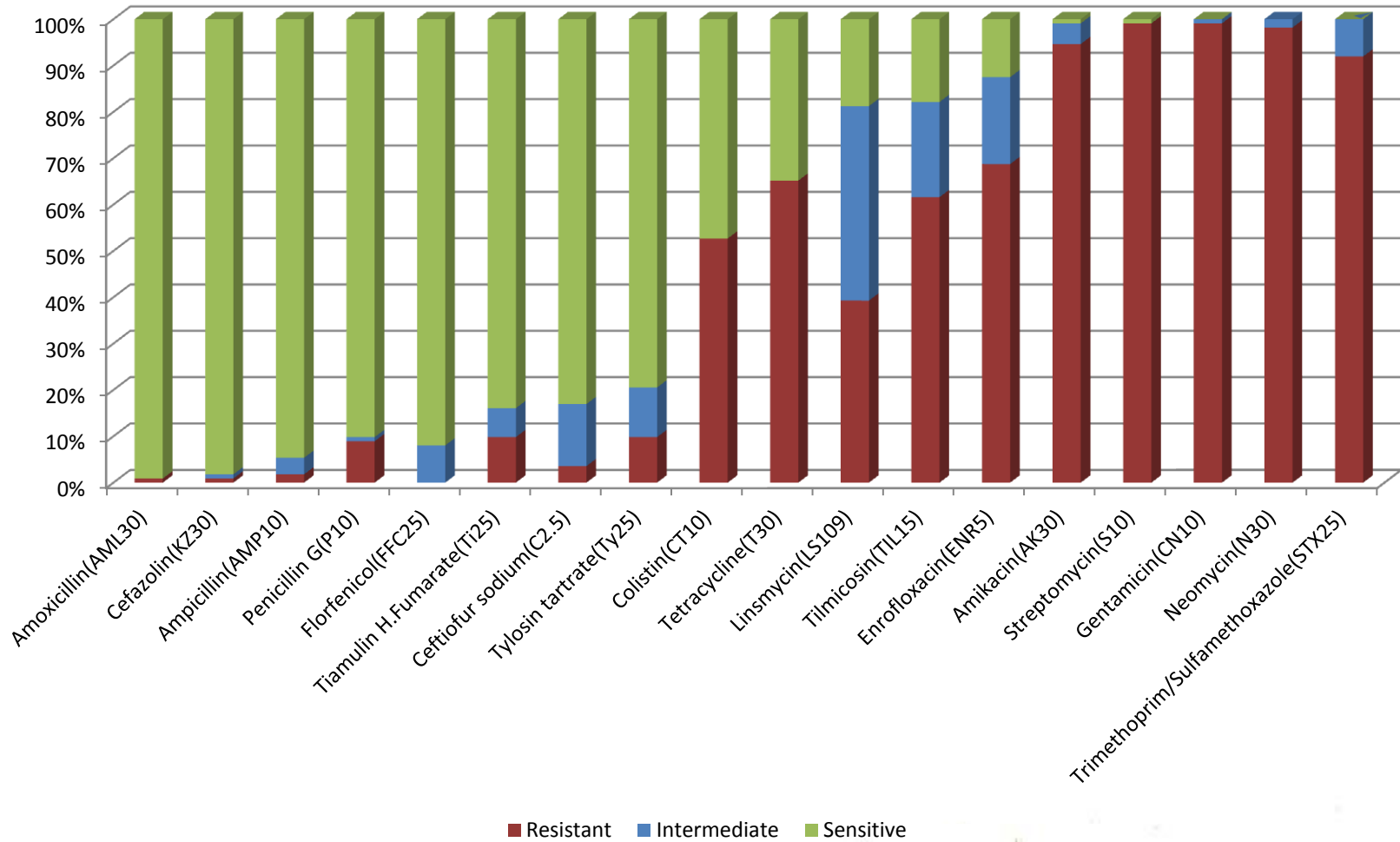
Clostridium perfringens

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	57	112	106	94.6%	5	4.5%	1	0.9%
Amoxicillin(AML30)			1	0.9%	0	0.0%	111	99.1%
Ampicillin(AMP10)			2	1.8%	4	3.6%	106	94.6%
Cefazolin(KZ30)			1	0.9%	1	0.9%	110	98.2%
Tilmicosin(TIL15)			69	61.6%	23	20.5%	20	17.9%
Colistin(CT10)			59	52.7%	0	0.0%	53	47.3%
Enrofloxacin(ENR5)			77	68.8%	21	18.8%	14	12.5%
Florphenicol(FFC25)			0	0.0%	9	8.0%	103	92.0%
Ceftiofur sodium(C2.5)			4	3.6%	15	13.4%	93	83.0%
Gentamycin(CN10)			111	99.1%	1	0.9%	0	0.0%
Linsmycin(LS109)			44	39.3%	47	42.0%	21	18.8%
Neomycin(N30)			110	98.2%	2	1.8%	0	0.0%
Penicillin G(P10)			10	8.9%	1	0.9%	101	90.2%
Tiamulin H.Fumarate(Ti25)			11	9.8%	7	6.3%	94	83.9%
Streptomycin(S10)			111	99.1%	0	0.0%	1	0.9%
Tetracycline(T30)			73	65.2%	0	0.0%	39	34.8%
Trimethoprim/ Sulfamethoxazole(STX25)			103	92.0%	9	8.0%	0	0.0%
Tylosin tartrate(Ty25)	11	9.8%	12	10.7%	89	79.5%		

Clostridium perfringens



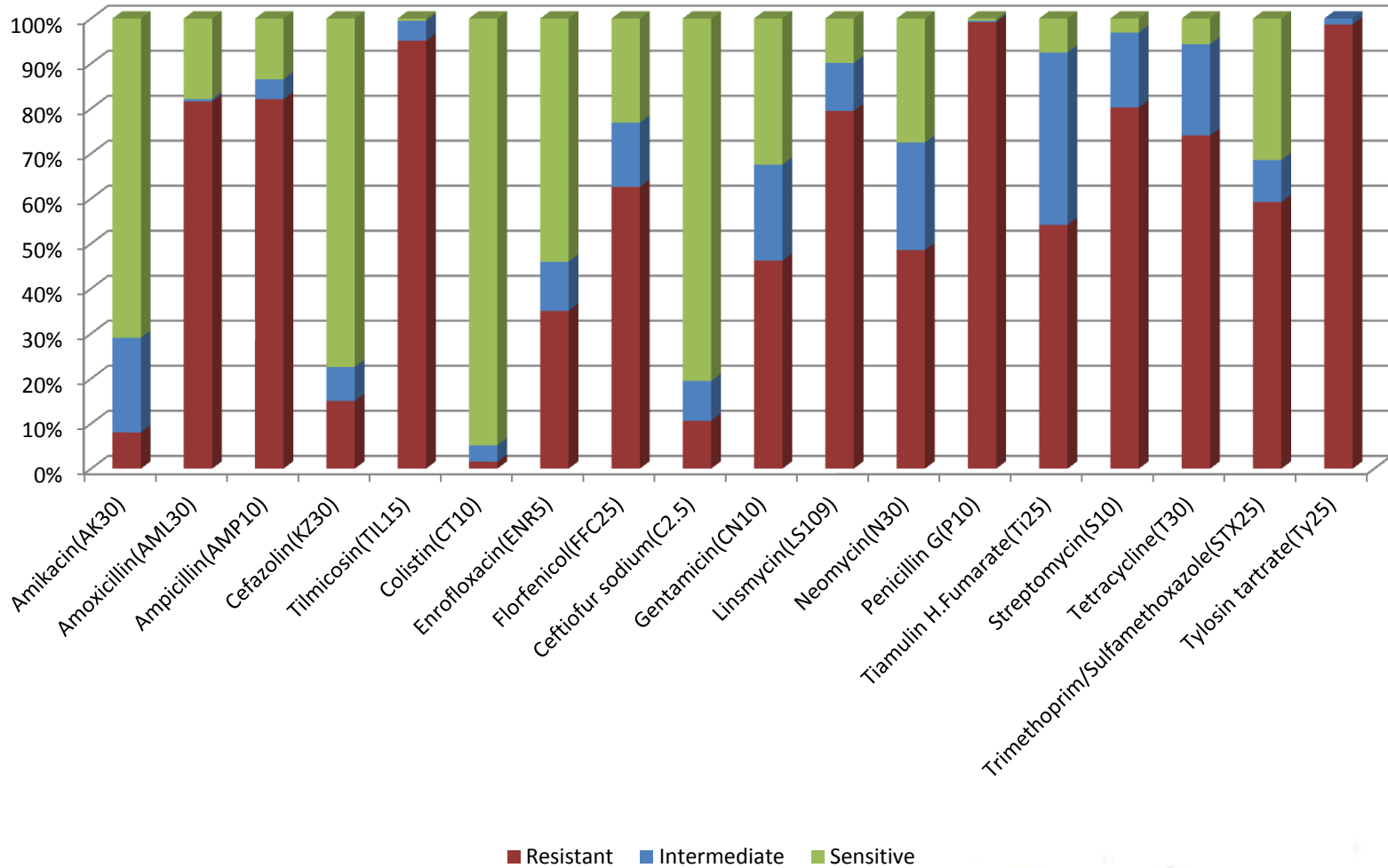
Clostridium perfringens



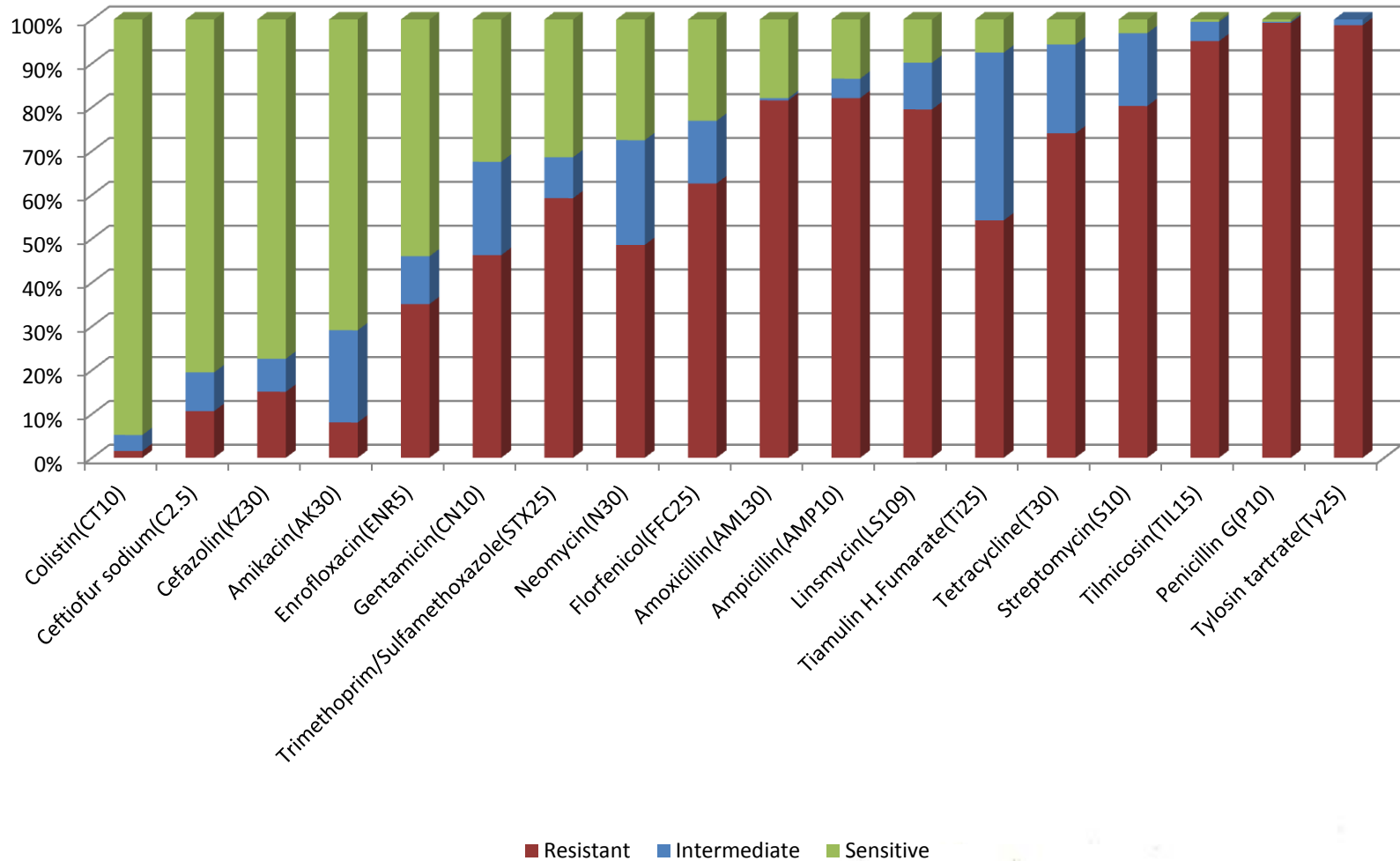
Escherichia coli

약 제 명	농장수	Test	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			Test	%	Test	%	Test	%
Amikacin(AK30)	209	385	31	8.1%	81	21.0%	273	70.9%
Amoxicillin(AML30)			314	81.6%	2	0.5%	69	17.9%
Ampicillin(AMP10)			316	82.1%	17	4.4%	52	13.5%
Cefazolin(KZ30)			58	15.1%	29	7.5%	298	77.4%
Tilmicosin(TIL15)			366	95.1%	17	4.4%	2	0.5%
Colistin(CT10)			6	1.6%	14	3.6%	365	94.8%
Enrofloxacin(ENR5)			135	35.1%	42	10.9%	208	54.0%
Florphenicol(FFC25)			241	62.6%	55	14.3%	89	23.1%
Ceftiofur sodium(C2.5)			41	10.6%	34	8.8%	310	80.5%
Gentamycin(CN10)			178	46.2%	82	21.3%	125	32.5%
Linsmycin(LS109)			306	79.5%	41	10.6%	38	9.9%
Neomycin(N30)			187	48.6%	92	23.9%	106	27.5%
Penicillin G(P10)			382	99.2%	1	0.3%	2	0.5%
Tiamulin H.Fumarate(Ti25)			209	54.2%	147	38.2%	29	7.5%
Streptomycin(S10)			309	80.3%	64	16.6%	12	3.1%
Tetracycline(T30)			285	74.0%	78	20.3%	22	5.7%
Trimethoprim/ Sulfamethoxazole(STX25)			228	59.2%	36	9.4%	121	31.4%
Tylosin tartrate(Ty25)	380	98.7%	5	1.3%	0	0.0%		

Escherichia coli



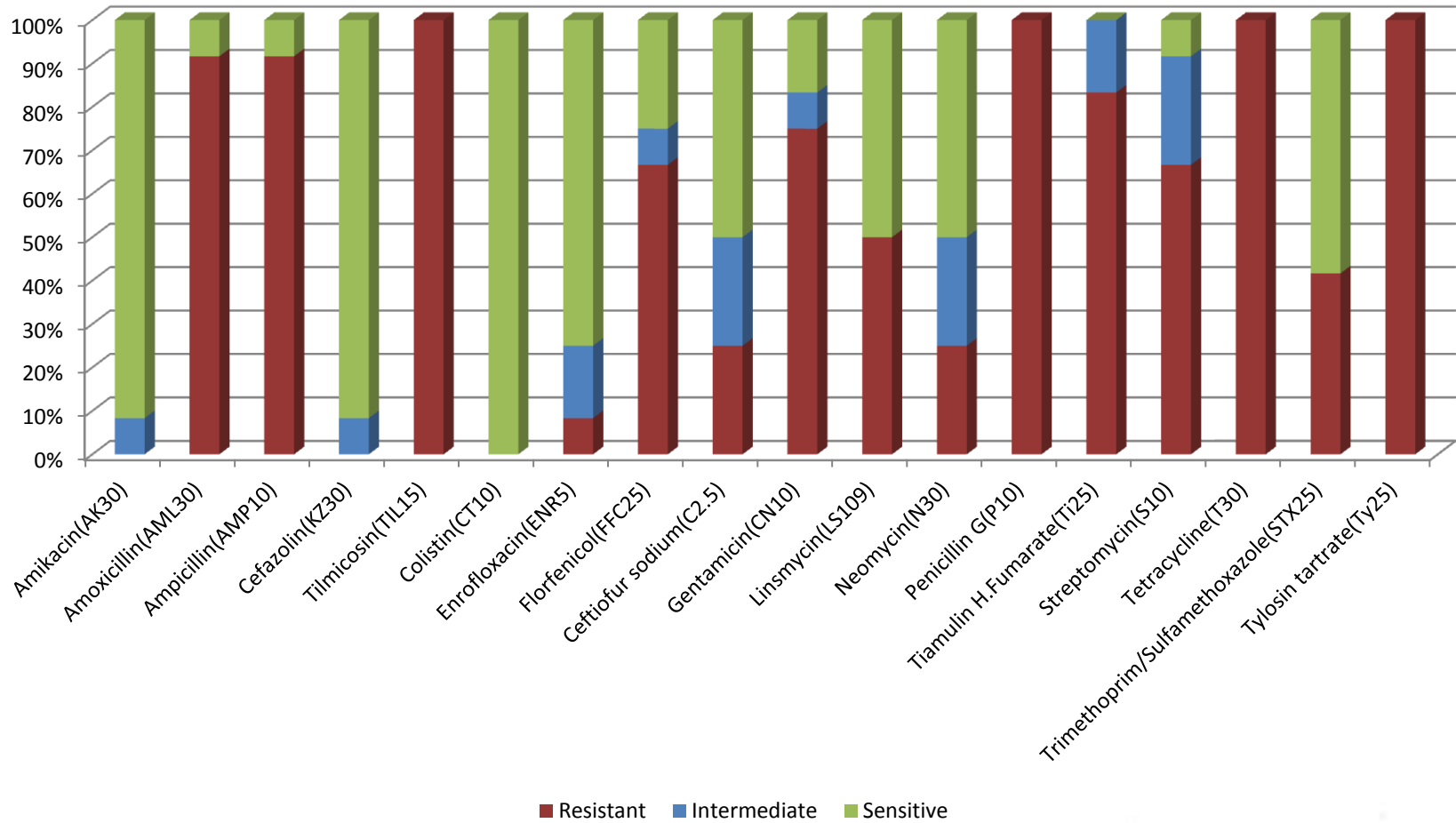
Escherichia coli



Salmonella spp.(serogroup B)

약 제 명	농장수	검사횟수	항생제 내성, 효과중간, 감수성 비율					
			Resistant		Intermediate		Sensitive	
			검출횟수	%	검출횟수	%	검출횟수	%
Amikacin(AK30)	8	12	0	0.0%	1	8.3%	11	91.7%
Amoxicillin(AML30)			11	91.7%	0	0.0%	1	8.3%
Ampicillin(AMP10)			11	91.7%	0	0.0%	1	8.3%
Cefazolin(KZ30)			0	0.0%	1	8.3%	11	91.7%
Tilmicosin(TIL15)			12	100.0%	0	0.0%	0	0.0%
Colistin(CT10)			0	0.0%	0	0.0%	12	100.0%
Enrofloxacin(ENR5)			1	8.3%	2	16.7%	9	75.0%
Florfenicol(FFC25)			8	66.7%	1	8.3%	3	25.0%
Ceftiofur sodium(C2.5)			3	25.0%	3	25.0%	6	50.0%
Gentamicin(CN10)			9	75.0%	1	8.3%	2	16.7%
Linsmycin(LS109)			6	50.0%	0	0.0%	6	50.0%
Neomycin(N30)			3	25.0%	3	25.0%	6	50.0%
Penicillin G(P10)			12	100.0%	0	0.0%	0	0.0%
Tiamulin H.Fumarate(Ti25)			10	83.3%	2	16.7%	0	0.0%
Streptomycin(S10)			8	66.7%	3	25.0%	1	8.3%
Tetracycline(T30)			12	100.0%	0	0.0%	0	0.0%
Trimethoprim/Sulfamethoxazole(STX25)			5	41.7%	0	0.0%	7	58.3%
Tylosin tartrate(Ty25)	12	100.0%	0	0.0%	0	0.0%		

Salmonella spp.(serogroup B)



Salmonella spp.(serogroup B)

