



ICAR 2012
CONFERENCE



Information System for Profitable Semen Selection of Hanwoo in Korea

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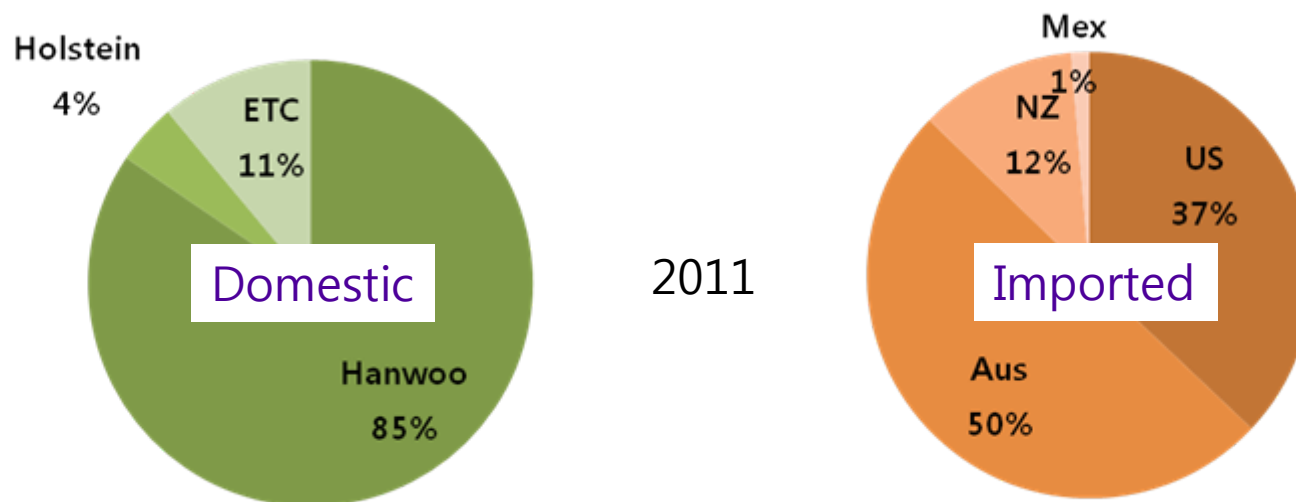




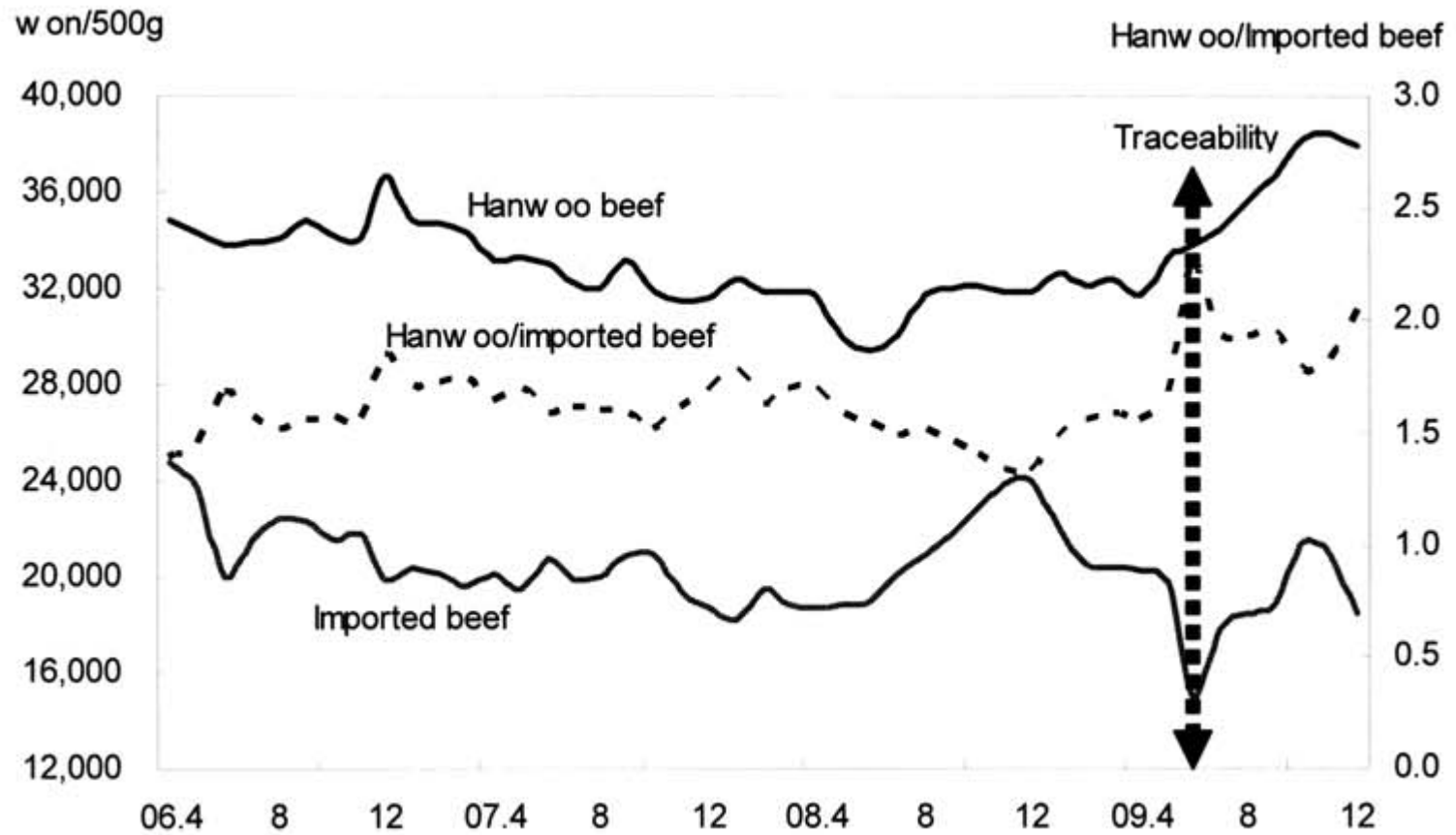
Overview of Hanwoo Industry

Year	No. of Hanwoo (1,000)	No. of Farms (1,000)	Heads per Farm	Consumption per Capita (kg)	Imported Beef (kTon)
2005	1,819	187.7	9.7	6.7	142.6
2009	2,635	169.0	15.6	8.1	197.9
2011	2,950	157.6	18.1	10.7	289.4

◆ The degree of self-sufficiency of beef in 2011 : 41.6%



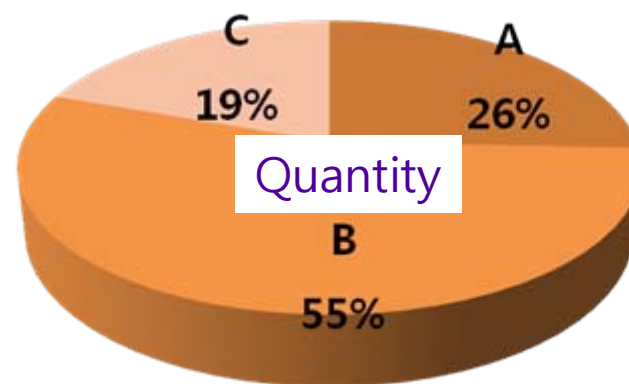
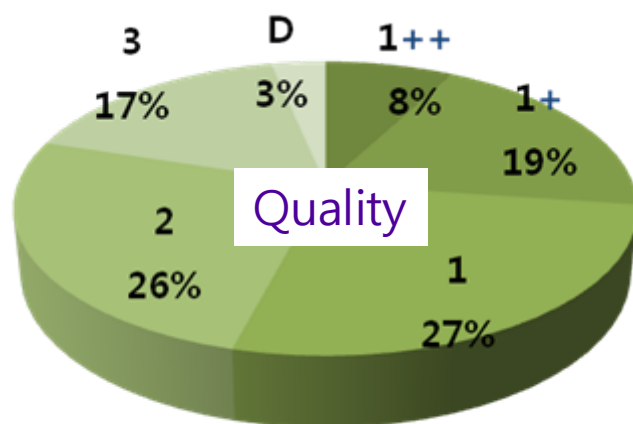
◆ The share of Hanwoo in agriculture : 10.2% (€ 305.8m)



◆ Comparison of Retail Prices of Hanwoo and Imported Beef

Beef Grading System

		Quality					
		1++	1+	1	2	3	D(extra)
Quantity	A	1++A	1+A	1A	2A	3A	
	B	1++B	1+B	1B	2B	3B	
	C	1++C	1+C	1C	2C	3C	

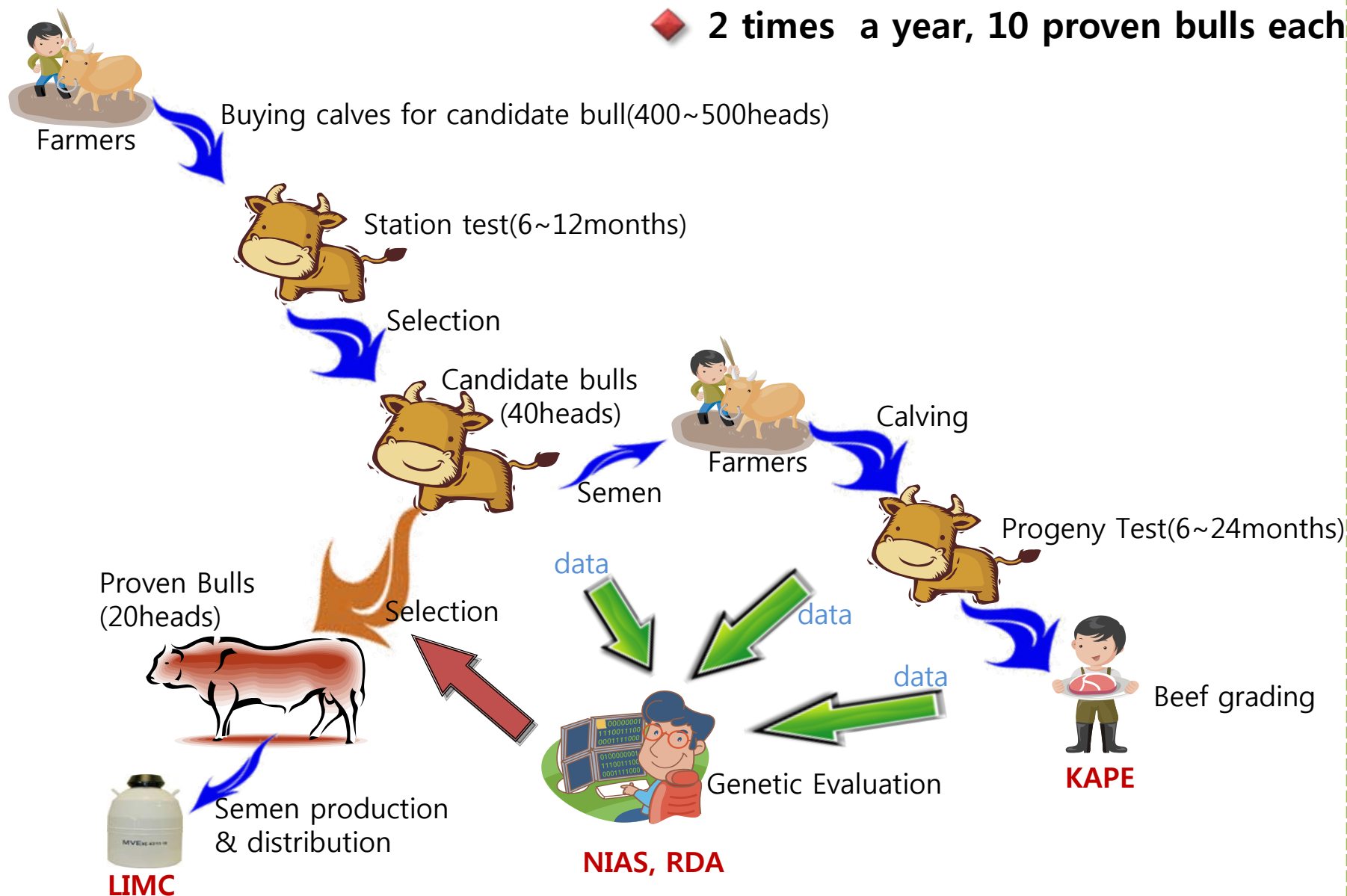


◆ Relative Price Ratio by Quality Grade (%) (2012.4)

1++	1+	1	2	3	D
130.1	118.2	106.9	81.7	62.7	35.8

National Genetic Evaluation System

◆ 2 times a year, 10 proven bulls each



◆ Development of Animal Model for Evaluation

(~'94)Phenotype Selection →

('95~)Mono-trait Animal Model →

('09~)Multi-trait Animal Model

◆ Selection of Proven Bull : total 436 heads('89~'11)

◆ 18month Weight : ('80)331kg → ('95)491kg → ('09)574kg

◆ Genetic Gain : ('80~'99) 0.02kg/yr → ('00~'09) 0.82kg/yr

◆ 1st Grade Proportion : ('95)13% → ('00)25% → ('09)57%

- ◆ Book : 4,000 copies (11issues)
- ◆ Excel VBA : 2,300 downloads (version 10)
- ◆ Online DB : Beta testing
- ◆ Smart Phone App : 1,500 downloads (version 1)
- ◆ Issued or updated by 2 times a year
- ◆ Distributed to Farmers, AI technicians, Extension Centers

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Cow's Father KPN472

Proven	I	S	E	B	I	12
Bull		W	M	F	F	W
No.	C	T	A	T	C	T

KPN550 0.0% C C B A C -

KPN587 0.4% C C D A C -

KPN593 0.0% B B B A B -

KPN614 0.0% B B A B A -

KPN627 0.9% C C C B B -

KPN634 0.1% B C D A A -

KPN637 0.8% A B D A B -

KPN641 0.0% C A B A C -

KPN650 3.1% C B C B B warning

KPN652 0.1% B B C B B -

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Excel VBA



한우 교배계획 프로그램 10호

Ver.1.0

암소개체번호

정책선택방법

암소개체불러오기

1

판매정책

보유정책

직접입력

결과조회

나만의 선발지수
만들기

형 질
가중치

12개월체중

도체중

등심단면적

등지방두께

근내지방도

한우 교배계획_길라잡이_제8호_부록.xlsm - Microsoft Excel

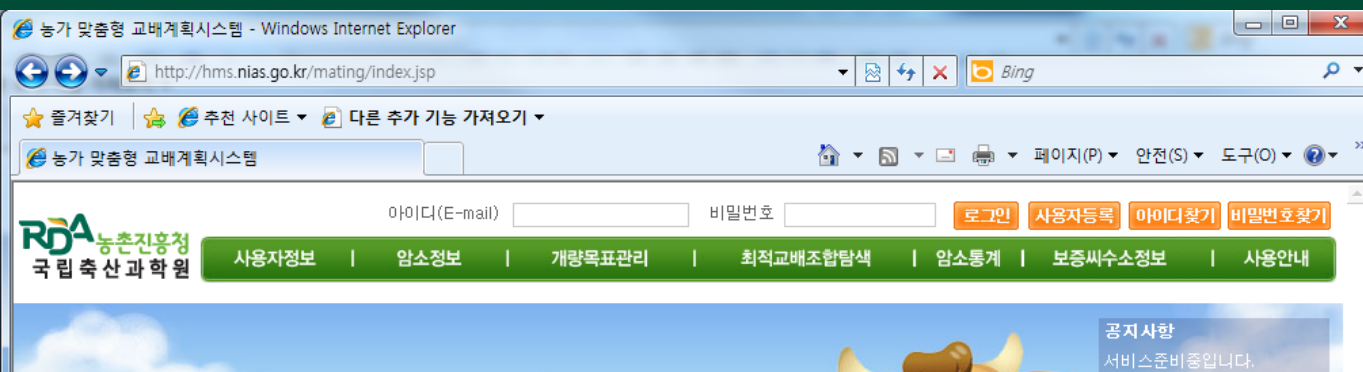
삽입 페이지 레이아웃 수식 데이터 검토 보기 개발 도구 추가 기능

A B C D E F G H I J

농장 암소 혈통입력

번호	암소개체번호	아비KPN	외조부KPN	외증조부KPN
1	1234	KPN700	KPN600	KPN500
2	1235	KPN701	KPN601	KPN501
3	1236	KPN702	KPN602	KPN502
4	1237	KPN703	KPN603	KPN503
5	1238	KPN704	KPN604	KPN504
6	1239	KPN705	KPN605	KPN505
7	1240	KPN706	KPN606	KPN506
8	1241	KPN707	KPN607	KPN507
9	1242	KPN708	KPN608	KPN508
10	1243	KPN709	KPN609	KPN509
11	1244	KPN710	KPN610	KPN510
12	1245	KPN711	KPN611	KPN511
13	1246	KPN712	KPN612	KPN512
14	1247	KPN713	KPN613	KPN513
15	1248	KPN714	KPN614	KPN514
16	1249	KPN715	KPN615	KPN515
17	1250	KPN716	KPN616	KPN516
18	1251	KPN717	KPN617	KPN517
19	1252	KPN718	KPN618	KPN518
20	1253	KPN719	KPN619	KPN519
21	1254	KPN720	KPN620	KPN520
22	1255	KPN721	KPN621	KPN521

교배계획 농장암소 보유정책



최적교배조합탐색

- ▶ 최적교배조합결과
- ▶ 최적교배조합통계
- ▶ 씨수소통계
- ▶ 과거 최적교배조합결과

▶ 최적교배 조합결과

홈 > 최적교배조합탐색 > 최적교배조합결과

목표 목표1 씨수소수 3 검색

번호	목표명	암소당추천씨수소수	등록일자
7	목표1	3	09/12/23

과거자료검색 1순위선택 무작위선택 선택인쇄 저장 선택한씨수소보기 엑셀다운로드

씨수소번호
KPN487 1마리
합 계 : 1 마리

선택	암소개체번호	씨수소번호	근교계수	12월령체중	도체중	등심면적	등지방두께	근내지방도	십자부고	흉폭	오차
☐	410002002042346	KPN486	0.000	-1.725	-3.905	-0.985	-0.225	0.070	0.605	1.605	-48.270
☒	410002002042346	KPN487	0.000	-1.725	-3.905	-0.985	-0.225	0.070	0.605	1.605	-48.270
☐	410002002042346	KPN505	0.000	-0.460	2.925	0.575	0.385	0.100	-0.610	0.755	-7.714

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암소코드	씨수소번호	근교계수	생시체중	미유시체중	12월령체중	도체중
410002002042346	KPN487	0.000	0.610	0.605	-1.725	-3.905
등심면적	등지방두께	근내지방도	체고	십자부고	체장	흉심
-0.985	-0.225	0.070	1.105	0.605	-1.065	0.555

Smart Phone Application

- ◆ iOS and Andriod Versions
- ◆ Data table embeded to program file : works without network access



olleh 3G 오후 10:53 90%

↑ 암소 정보 입력 🔍 신랑 후보

✓ 암소 개체번호 002018782377

✓ 암소 아비번호 KPN432

✓ 암소 외조부번호 KPN

✓ 암소 외증조부번호 KPN

1	2	3
	ABC	DEF
4	5	6
GHI	JKL	MNO
7	8	9
PQRS	TUV	WXYZ
	0	✕

olleh 3G 오후 8:59 99%

⬅️ 이전 신랑 추천 후보

암소개체번호 : 002018782377

아비 : KPN432 외조부 : KPN385 외증조부 : KPN250

도체중	통신탄연적	통지방두께	근내지방도	12개월체중
C	D	B	C	C

판매정액 62(3)개 보유정액

선택	장액번호	근교계수	도체중	통신탄연적	통지방두께	근내지방도	12개월체중
✓	KPN757	0.0%	A	A	B	A	A
✓	KPN780	0.0%	A	A	B	C	A
✓	KPN656	0.0%	C	A	B	C	C
⊙	KPN758	0.0%	C	B	B	A	B

선택정액 저장 go





Thank you.

