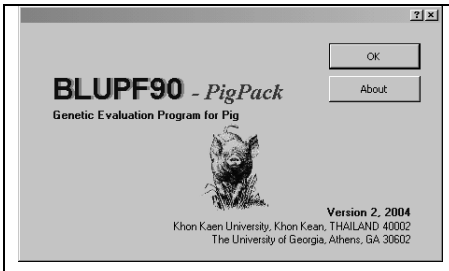
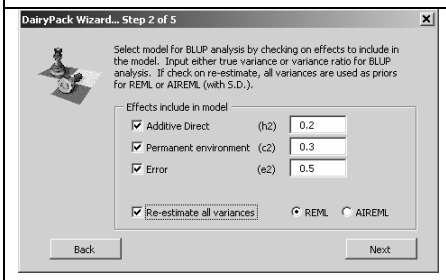
A. General View

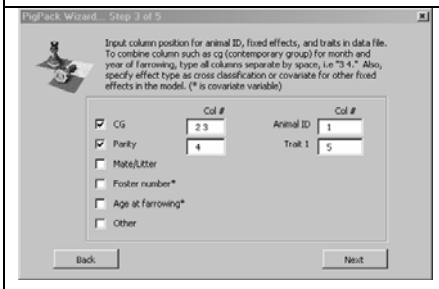


1. *PigPAK* is a set of programs in BLUPF90 family with the specific purpose of pig genetic evaluation.

2. *PigPAK* performs variance component estimation using REML and BLUP methodology with wizard interface.

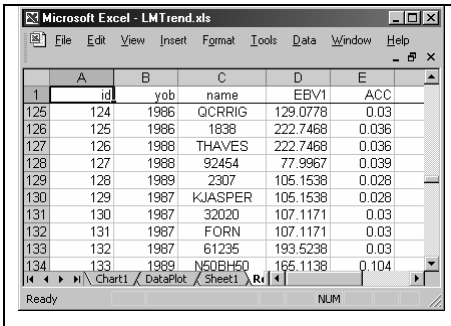


3. BLUP analysis can be done directly with true variance or variance ratio. In addition, the user can re-estimate variance components with REML or AIREML.



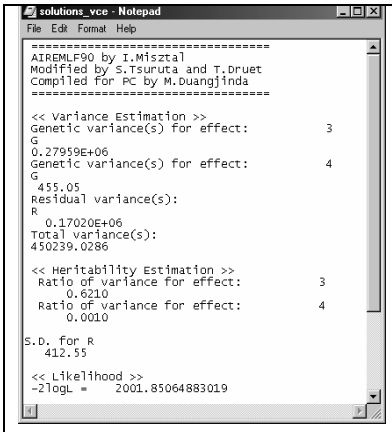
4. Original performance data and pedigree files are used in the analysis. Therefore, all effects in the model are simply specified by column number in data file. Mate/Litter for sire/dam ID data file can be stored in alpha-numeric format and it will be automatically accounted for as a random effect if PE model in 3 is selected.

B. View of Reports

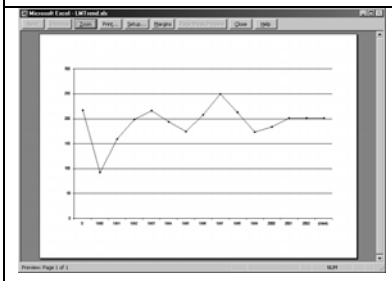


	A	B	C	D	E
1	id	yob	name	EBV1	ACC
125	124	1986	QCRRIG	129.0778	0.03
126	125	1986	1838	222.7468	0.036
127	126	1988	THAVES	222.7468	0.036
128	127	1988	92454	77.9967	0.039
129	128	1989	2307	105.1538	0.028
130	129	1987	KJASPER	105.1538	0.028
131	130	1987	32020	107.1171	0.03
132	131	1987	FORN	107.1171	0.03
133	132	1987	61235	193.5238	0.03
134	133	1989	N50BH50	165.1138	0.104

5. BLUP EBV report with accuracy is created using original ID in Excel format. Therefore sorting and filtering can be done simply using Excel functions.

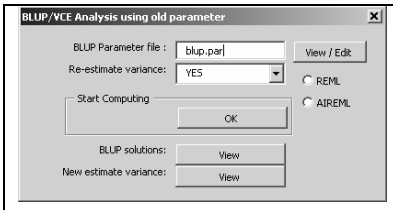


6. If REML or AIREML variance component estimation is performed the new variance estimates are kept in a separate file.

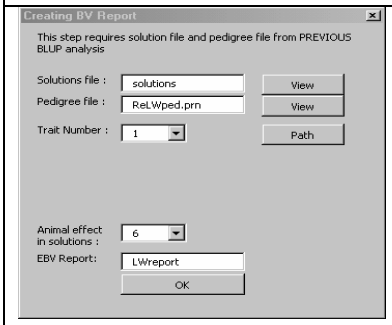


7. A genetic trend report is also created if desired. All graphic properties can be modified using general Excel features.

C. Advanced Options

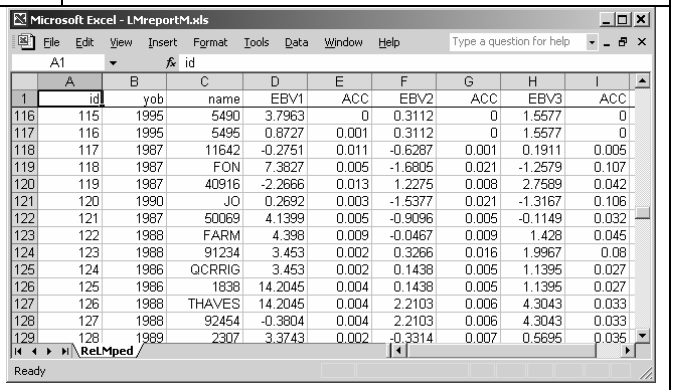


8. Previous renumbered data and pedigree file with parameter file can be modified and reanalyzed.



9. BV reports for single trait or multiple trait from previous solutions from PigPAK or another BLUP family can be recreated with specified options.

10. Multiple trait BV reports with accuracy can be created up to four traits.



	A	B	C	D	E	F	G	H	I
1	id	yob	name	EBV1	ACC	EBV2	ACC	EBV3	ACC
116	115	1995	5490	3.7963	0	0.3112	0	1.5577	0
117	116	1995	5495	0.8727	0.001	0.3112	0	1.5577	0
118	117	1987	11642	-0.2751	0.011	-0.6287	0.001	0.1911	0.005
119	118	1987	FON	7.3827	0.005	-1.6805	0.021	-1.2579	0.107
120	119	1987	40916	-2.2666	0.013	1.2275	0.008	2.7589	0.042
121	120	1990	JO	0.2692	0.003	-1.5377	0.021	-1.3167	0.106
122	121	1987	50069	4.1399	0.005	-0.9096	0.005	-0.1149	0.032
123	122	1988	FARM	4.398	0.009	-0.0467	0.009	1.428	0.045
124	123	1988	91234	3.453	0.002	0.3266	0.016	1.9967	0.08
125	124	1986	QCRRIG	3.453	0.002	0.1438	0.005	1.1395	0.027
126	125	1986	1838	14.2045	0.004	0.1438	0.005	1.1395	0.027
127	126	1988	THAVES	14.2045	0.004	2.2103	0.006	4.3043	0.033
128	127	1988	92454	-0.3804	0.004	2.2103	0.006	4.3043	0.033
129	128	1989	2307	3.3743	0.002	-0.3314	0.007	0.5695	0.035