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Development of variation in a random bred mouse population

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1. Material:

- 42 generations (1989 - 2005)
- 24 363 individual records
- varied population size
- 1- 3 halfsib families per sire

Table 1: Overall heritability

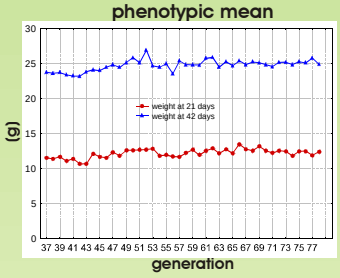
	W21(g)	W42(g)	G42(g)
s^2_A	1.006	2.761	.00329
s^2_P	1.793	4.676	.00664
h^2	.563	.591	.496
(sh^2)	(0.12)	(.014)	(.015)

Table 2: Overall correlation ($r_A \backslash r_P$)

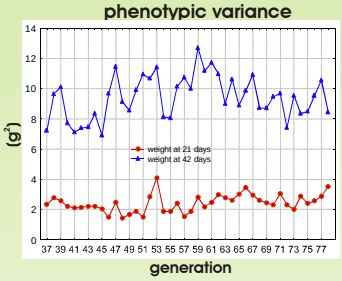
	W21	W42	G42
W21	1	.654	.062
W42	.518	1	.782
G42	-.022	.894	1

2. Trend of phenotypic mean and variance ?

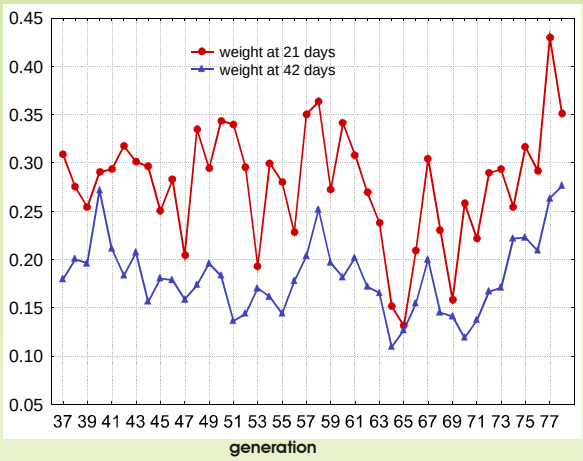
phenotypic mean



phenotypic variance

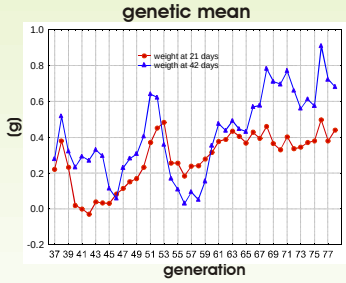


4. Trend of h^2 ?

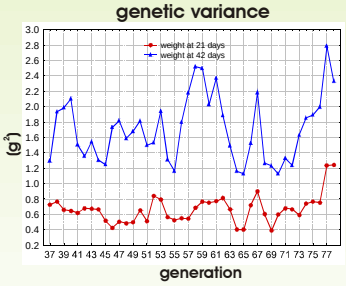


3. Trend of genetic mean and variance ?

genetic mean



genetic variance



5. Conclusions

- stable phenotypic mean and variance
- increased genetic mean and variance
- high variation and increase in generation estimate for heritability
- marked difference between generation and overall estimates

W21 = weight at 21 days W42 = weight at 42 days G42 = growth 21- 42 days