|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | With initial training population | | | | Without initial training population | | |
| Scenario | $P:$G=1:2 | $P:$G=1:1 | $P:$G=2:1 | $P:$G=1:2 | | $P:$G=1:1 | $P:$G=2:1 |
| Male candidates | | | | | | | |
| C11, S1 | 0.370.04a ,A | 0.370.04a,A | 0.370.04a,A | 0.370.04a,A | | 0.370.04a,A | 0.370.04a,A |
| C11, S2 | 0.940.01b,A | 0.940.01b,A | 0.940.01b,A | 0.940.01b,A | | 0.940.01b,A | 0.940.01b,A |
| G10 | 0.890.03c,A | 0.900.02bc,AB | 0.910.01bc,B | 0.810.03b,A \* | | 0.840.01b,B \* | 0.870.01b,C \* |
| G9 | 0.900.03bc,A | 0.910.02bc,A | 0.910.01bc,A | 0.850.02c,A \* | | 0.870.01bc,B \* | 0.900.01bc,C \* |
| G8 | 0.910.01bc,A | 0.910.01bc,A | 0.910.01bc,A | 0.860.01cd,A \* | | 0.890.01c,B \* | 0.900.01bc,B |
| G5 | 0.910.01bc,A | 0.910.00bc,A | 0.910.01bc,A | 0.900.01d,A | | 0.910.01c,A | 0.910.01c,A |
| G2 | 0.910.01bc,A | 0.910.00bc,A | 0.900.01bc,A | 0.900.01d,A | | 0.900.01c,A | 0.900.01bc,A |
| G1 | 0.890.01c,A | 0.900.01c,A | 0.890.01c,A | 0.890.01cd,A | | 0.890.01c,A | 0.890.01bc,A |
| Sires | | | | | | | |
| C11 | 0.860.05a,A | 0.860.05a,A | 0.860.05a,A | 0.860.05a,A | | 0.860.05a,A | 0.860.05a,A |
| G10 | 0.750.04b,A | 0.750.03b,A | 0.730.05b,A | 0.670.08bc,A \* | | 0.680.05cde,A \* | 0.670.06b,A \* |
| G9 | 0.760.04b,A | 0.720.06bc,AB | 0.690.05c,A | 0.700.05b,A \* | | 0.720.05bc,A | 0.710.05b,A |
| G8 | 0.760.03b,A | 0.690.05cd,B | 0.680.06c,B | 0.710.05b,A \* | | 0.740.05b,A \* | 0.700.07b,A |
| G5 | 0.680.07c,A | 0.670.08de,A | 0.690.04c,A | 0.680.05bc,A | | 0.690.05cd,A | 0.690.03b,A |
| G2 | 0.670.05c,A | 0.670.05de,A | 0.670.04c,A | 0.650.06c,A | | 0.640.07e,A | 0.690.05b,A |
| G1 | 0.660.06c,A | 0.630.05e,A | 0.670.04c,A | 0.670.04bc,A | | 0.670.03de,A | 0.690.05b,A |
| Female candidates | | | | | | | |
| C11 | 0.450.02a,A | 0.450.02a,A | 0.450.02a,A | 0.450.02a,A | | 0.450.02a,A | 0.450.02a,A |
| G10 | 0.480.01ab,A | 0.480.01ab,A | 0.510.01b,B | 0.460.02ab,A \* | | 0.470.02ab,AB | 0.490.01b,B \* |
| G9 | 0.490.02b,A | 0.500.01b,B | 0.520.01b,C | 0.470.02ab,A \* | | 0.490.02bc,B | 0.520.01bc,C |
| G8 | 0.510.01b,A | 0.510.01b,A | 0.540.01bc,B | 0.490.02bc,A \* | | 0.520.01cd,B | 0.530.01cd,C |
| G5 | 0.510.01bc,A | 0.550.01c,B | 0.570.01c,C | 0.520.01cd,A | | 0.550.01de,B | 0.570.01d,C |
| G2 | 0.550.01cd,A | 0.570.01c,B | 0.570.01c,B | 0.550.01d,A | | 0.560.02e,AB | 0.570.01d,B |
| G1 | 0.560.01d,A | 0.560.01c,A | 0.560.01c,A | 0.550.01d,A | | 0.560.01e,A | 0.560.01d,A |
| Cows | | | | | | | |
| C11 | 0.480.03a,A | 0.480.03a,A | 0.480.03a,A | 0.480.03a,A | | 0.480.03a,A | 0.480.03a,A |
| G10 | 0.560.02b,A | 0.590.02b,B | 0.630.01b,C | 0.530.01b,A \* | | 0.560.01b,B \* | 0.610.01b,C \* |
| G9 | 0.590.03bc,A | 0.630.02c,B | 0.700.01c,C | 0.570.02bc,A \* | | 0.620.02c,B | 0.680.02c,C \* |
| G8 | 0.620.02c,A | 0.670.02c,B | 0.740.02d,C | 0.600.02c,A \* | | 0.660.01d,B | 0.730.02d,C |
| G5 | 0.700.02d,A | 0.770.01d,B | 0.790.02e,C | 0.690.02d,A | | 0.760.01e,B | 0.780.02e,B |
| G2 | 0.760.02e,A | 0.790.02d,B | 0.780.01e,AB | 0.760.01e,A | | 0.770.02e,A \* | 0.770.01de,A |
| G1 | 0.770.02e,A | 0.770.02d,A | 0.770.01de,A | 0.760.01e,A | | 0.760.02e,A | 0.760.02de,A |