**Supplementary Table 3.** Correlation between estimates of SNP additive (a) and dominance (b) effects, individual breeding values (c) and dominance deviations (d) with the SN, SC, AN and Full Models in population 1.

1. SNP additive effects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | Full |
| SN | - | 0.992 | 0.993 | 0.995 |
| SC | - | - | 0.991 | 0.998 |
| AN |  |  | - | 0.997 |

1. SNP dominance effects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | Full |
| SN | - | 0.989 | 0.990 | 0.991 |
| SC | - | - | 0.988 | 0.999 |
| AN |  |  | - | 0.994 |

1. Breeding values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | Full |
| SN | - | 0.933 | 0.944 | 0.938 |
| SC |  | - | 0.998 | 0.999 |
| AN |  |  | - | 0.999 |

1. Dominance deviations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | Full |
| SN | - | 0.987 | 0.769 | 0.884 |
| SC |  | - | 0.856 | 0.944 |
| AN |  |  | - | 0.978 |

**Supplementary Table 4.** Correlation between estimates of SNP additive (a) and dominance (b) effects, individual breeding values (c) and dominance deviations (d) with the SN, SC, AN and FULL models in population 2.

1. SNP additive effects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | FULL |
| SN | - | 0.996 | 0.997 | 0.994 |
| SC | - | - | 0.996 | 0.999 |
| AN | - | - | - | 0.993 |

1. SNP dominance effects

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | FULL |
| SN | - | 0.994 | 0.997 | 0.990 |
| SC | - | - | 0.994 | 0.999 |
| AN | - | - | - | 0.990 |

1. Breeding values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | FULL |
| SN | - | 0.794 | 0.842 | 0.777 |
| SC | - | - | 0.994 | 0.999 |
| AN | - | - | - | 0.988 |

1. Dominance deviations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | SN | SC | AN | FULL |
| SN | - | 0.951 | 0.702 | 0.970 |
| SC | - | - | 0.857 | 0.773 |
| AN | - | - | - | 0.989 |