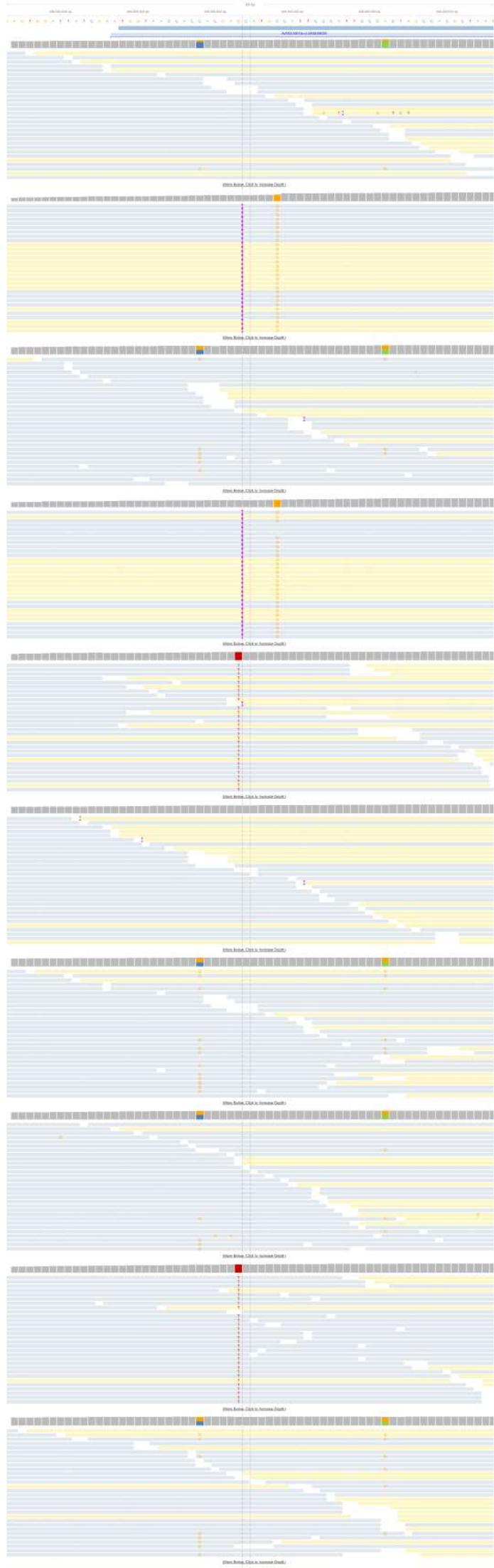


Supplementary files

1. Read alignment of target capture sequencing data of oat genotypes obtained through BWA-MEM. The SNP located on chromosome 2A at position 456055130 is the targeted Variant. Oat genotypes are arranged as follows: KF-318, NOS 819111-120, NOS 819111-70, NOS 81920-15, NOS 81937-11 NOS 81950-13, Delfin, Mathilda, WPB Oskar, Symphony. (fig. 1, Page 2)
2. Read alignment of target capture sequencing data of oat genotypes obtained through BWA-MEM. The SNP located on chromosome 2A at position 455932982 is the targeted Variant. Oat genotypes are arranged as follows: KF-318, NOS 819111-120, NOS 819111-70, NOS 81937-11 NOS 81950-13, Delfin, Mathilda and WPB Oskar. (fig. 2, Page 3)
3. Read alignment of target capture sequencing data of oat genotypes obtained through BWA-MEM. The deletion located on chromosome 2A at position 453603957 is the targeted Variant. Oat genotypes are arranged as follows: KF-318, NOS 819111-120, NOS 819111-70, NOS 81920-15, NOS 81937-11 NOS 81950-13, Delfin, Mathilda, WPB Oskar, Symphony. (fig. 3, Page 4)
4. Read alignment of target capture sequencing data of oat genotypes obtained through BWA-MEM. The insertion located on chromosome 2A at position 456585644 is the targeted Variant. Oat genotypes are arranged as follows: KF-318, NOS 819111-120, NOS 819111-70, NOS 81920-15, NOS 81937-11 NOS 81950-13, Delfin, Mathilda, WPB Oskar, Symphony. (fig. 4, Page 5)
5. Supplementary Table 1: Primers flanking the variants for validation study (Page 6)







Supplementary Table 1: Primers flanking the variants for validation study

| Name | Type | Gene | Sequence (5'-3') | Validation method | PCR product (bp) |
|---------------|-------------|----------------------------|---|--------------------------|-------------------------|
| 2A_456055130 | SNP | AVESA.00010b.r2.2AG0258170 | 456055130_F-GTGCTCTGCCCCCTGTATTC 456055130_R-CCATCGTCTGTTGTCCACCAT | Sanger | 500 |
| 2A_455932982 | SNP | AVESA.00010b.r2.2AG0258110 | 455932982_F-CCTCTGTTTGCTTCTCCACCA 455932982_R-AACACCTCCGGTTCAGCAAG | Sanger | 500 |
| 9bp_453603957 | Deletion | AVESA.00010b.r2.2AG0257420 | 7420_F-AACATACTGTCGTGGTTCGGC 7420_R-ACCTTCGCAGCAATAGCCAA | HRM | 169 |
| 3bp_456585644 | Insertion | AVESA.00010b.r2.2AG0258320 | 258320_F- CCGTCAAGTGGATTATCAAATGGT 258320_R-GTGGAGGTTGCCGACGATC | HRM | 181 |