**File Name**: Supplementary Data 1 **Description**: Scaffold classification and homology with *B. mori* chromosomes in *C. ohridella*, *N. degeerella*, and *T. sylvina*.

File Name: Supplementary Data 2 Description: *De novo* assembly (Example of *N. degeerella*).

**File Name**: Supplementary Data 3 **Description**: Coverage values for each library and after keeping only uniquely mapped reads in *C. ohridella*.

**File Name**: Supplementary Data 4 **Description**: Coverage values for each library and after keeping only uniquely mapped reads in *N. degeerella*.

**File Name**: Supplementary Data 5 **Description**: Coverage values for each library and after keeping only uniquely mapped reads in *T. sylvina*.

**File Name**: Supplementary Data 6 **Description**: Coverage values for each library and after keeping only uniquely mapped reads in *L. lunatus*.

File Name: Supplementary Data 7 Description: Bash script for reference mapping.

File Name: Supplementary Data 8 Description: DNA coverage estimation.

File Name: Supplementary Data 9 Description: CDS Bombyx mori.

File Name: Supplementary Data 10 Description: Chromosomal location of *Bombyx mori* CDS.

**File Name**: Supplementary Data 11 **Description**: Female and male coverage values of scaffolds assigned to *B. mori* chromosomes in *C. ohridella*.

File Name: Supplementary Data 12 Description: Female and male coverage values of scaffolds assigned to *B. mori* chromosomes in *N. degeerella*. **File Name**: Supplementary Data 13 **Description**: Female and male coverage values of scaffolds assigned to *B. mori* chromosomes in *T. sylvina*.

**File Name**: Supplementary Data 14 **Description**: Female and male coverage values of scaffolds assigned to *B. mori* chromosomes in *L. lunatus*.

File Name: Supplementary Data 15 Description: BLAT mapping of scaffolds onto *B. mori* genome.

**File Name**: Supplementary Data 16 **Description**: R code used to detect *in silico* Z-linked scaffolds.

**File Name**: Supplementary Data 17 **Description**: W-candidates in fasta format for *C. ohridella*.

File Name: Supplementary Data 18 Description: W-candidates in fasta format for *N. degeerella*.

File Name: Supplementary Data 19 Description: W-candidates in fasta format for *T. sylvina*.

**File Name**: Supplementary Data 20 **Description**: R code used to detect *in silico* W-candidates.

**File Name**: Supplementary Data 21 **Description**: Scaffold classification in *T. sylvina*, before adding the publicly available individual.

**File Name**: Supplementary Data 22 **Description**: R code used to identify the sex of the publicly available *T. sylvina* individual.