

## Schistosoma mansoni

BioProject [PRJEA36577](#) | Data Source [Wellcome Sanger Institute](#) | Taxonomy ID [6183](#)

### About *Schistosoma mansoni*

The trematode *Schistosoma mansoni* is one of the three major infectious agents responsible for the chronic debilitating disease schistosomiasis found throughout Africa and South America. The intermediate host for the parasite is a freshwater snail from the genus *Biomphalaria*, and the definitive host is a human. Schistosomiasis is widely considered to be second only to malaria as a global health problem and an incalculable drain on the economic development of endemic countries.

### Genome Assembly & Annotation

#### Assembly

The reads from short and long-range paired end capillary libraries and short-range Illumina paired end libraries were mapped to assembly accession GCA\_000237925.2 ([Protasio et al 2012](#); version 5.2). Mapped reads were scrutinised in GAP5 and manual edits to the assembly were made as necessary. Inspection of optical map alignments and integration of PacBio reads led to version 7, as presented here (GCA\_000237925.3). This assembly has been further improved following assimilation of Oxford Nanopore, PacBio, and HiC data to create a complete telomere-to-telomere chromosome scale assembly (expected in an upcoming release, version 8). All improvements leading to versions 7 and 8 are described in Buddenborg et al, in prep.

#### Annotation

Putative gene models from the annotation accompanying previous assembly GCA\_000237925.2 ([Protasio et al 2012](#)) and predictions using RNASeq data were resolved through manual curation using [Apollo](#) as a platform. For unchanged gene models, previous gene identifiers have been preserved (Buddenborg et al, in prep).

### Downloads

- [Genomic Sequence \(FASTA\)](#)
- [Hard-masked Genomic Sequence \(FASTA\)](#)
- [Soft-masked Genomic Sequence \(FASTA\)](#)
- [Annotations \(GFF3\)](#)

### Navigation

Search *Schistosoma mansoni* (PRJEA36577)...



View karyotype



Genome Browser (JBrowse)



Genome Browser (Ensembl)



Example gene page



Example gene tree



Gene Expression

### Assembly Statistics

Assembly	Smansoni_v7, GCA_000237925.3
Database Version	WBPS15
Genome Size	409,579,008
Data Source	Wellcome Sanger Institute
Annotation Version	2018-10-WormBase

