

WormBase 2007

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ABSTRACT

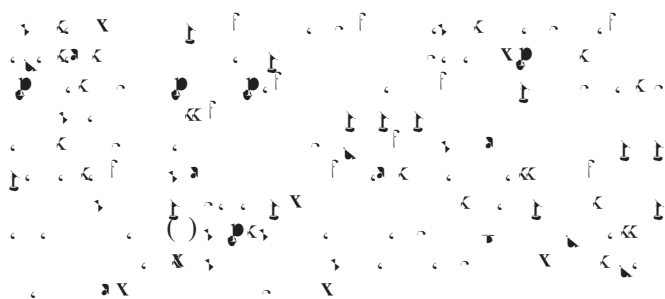
WormBase (www.wormbase.org) is the major publicly available database of information about *Caenorhabditis elegans*, an important system for basic biological and biomedical research. Derived from the initial ACeDB database of *C. elegans* genetic and sequence information, WormBase now includes the genomic, anatomical and functional information about *C. elegans*, other *Caenorhabditis* species and other nematodes. As such, it is a crucial resource not only for *C. elegans* biologists but the larger biomedical and bioinformatics communities. Coverage of core areas of *C. elegans* biology will allow the biomedical community to make full use of the results of intensive molecular genetic analysis and functional genomic studies of this organism. Improved search and display tools, wider cross-species comparisons and extended ontologies are some of the features that will help scientists extend their research and take advantage of other nematode species genome sequences.

PROGRESS

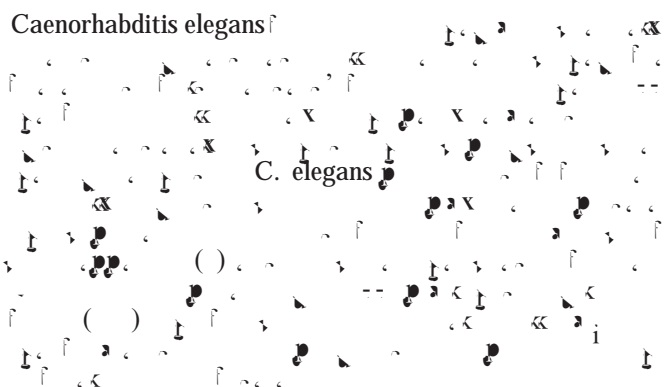
Caenorhabditis elegans

Caenorhabditis remanei *Caenorhabditis briggsae* *Brugia malayi*

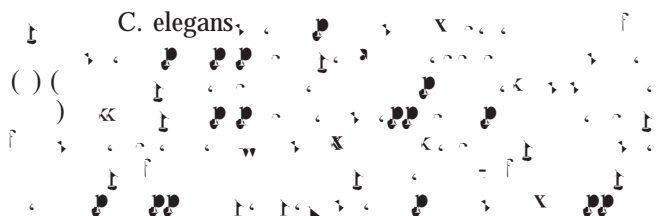
WEBSITE OUTLINE



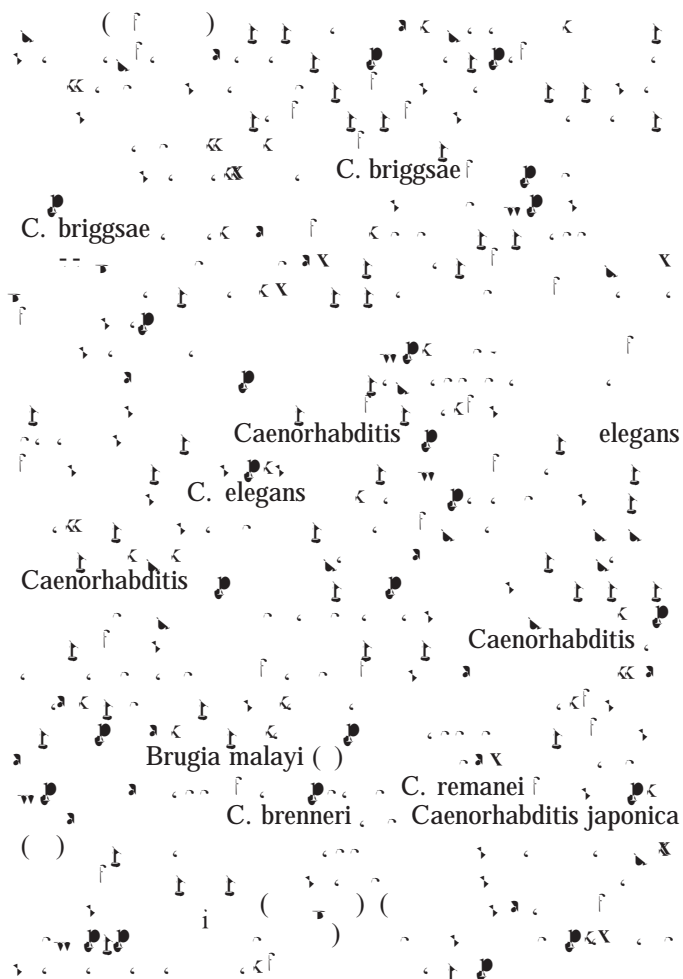
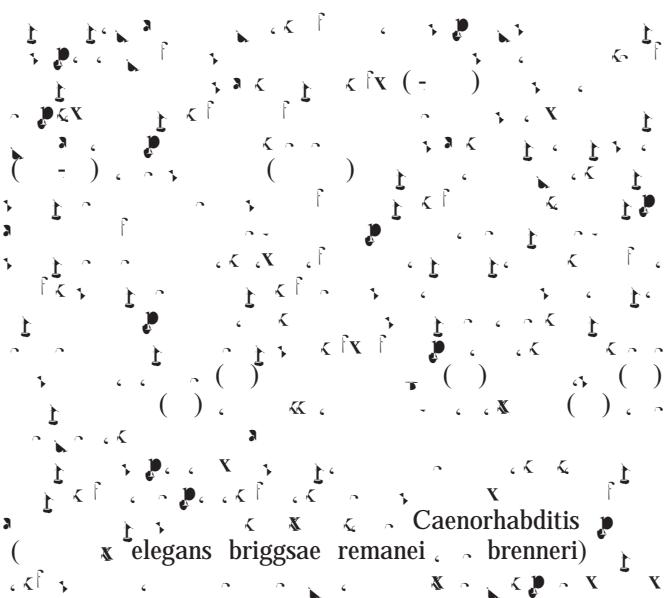
GENE STRUCTURE AND GENOME SEQUENCE CURATION



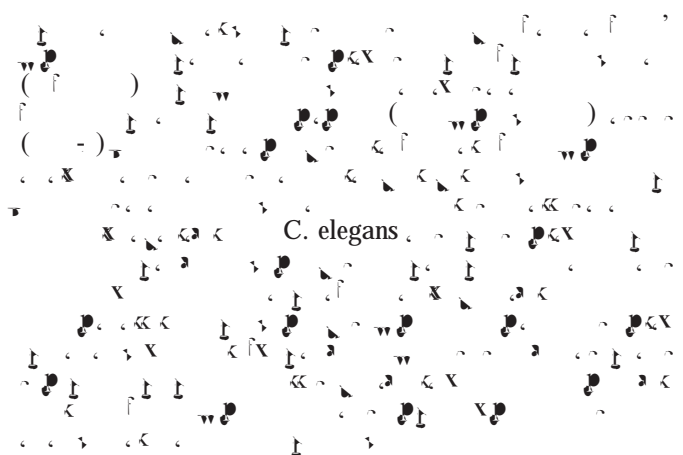
MASS SPECTROMETRY



COMPARATIVE GENOMICS



GENE EXPRESSION



GENE INTERACTIONS AND REGULATION



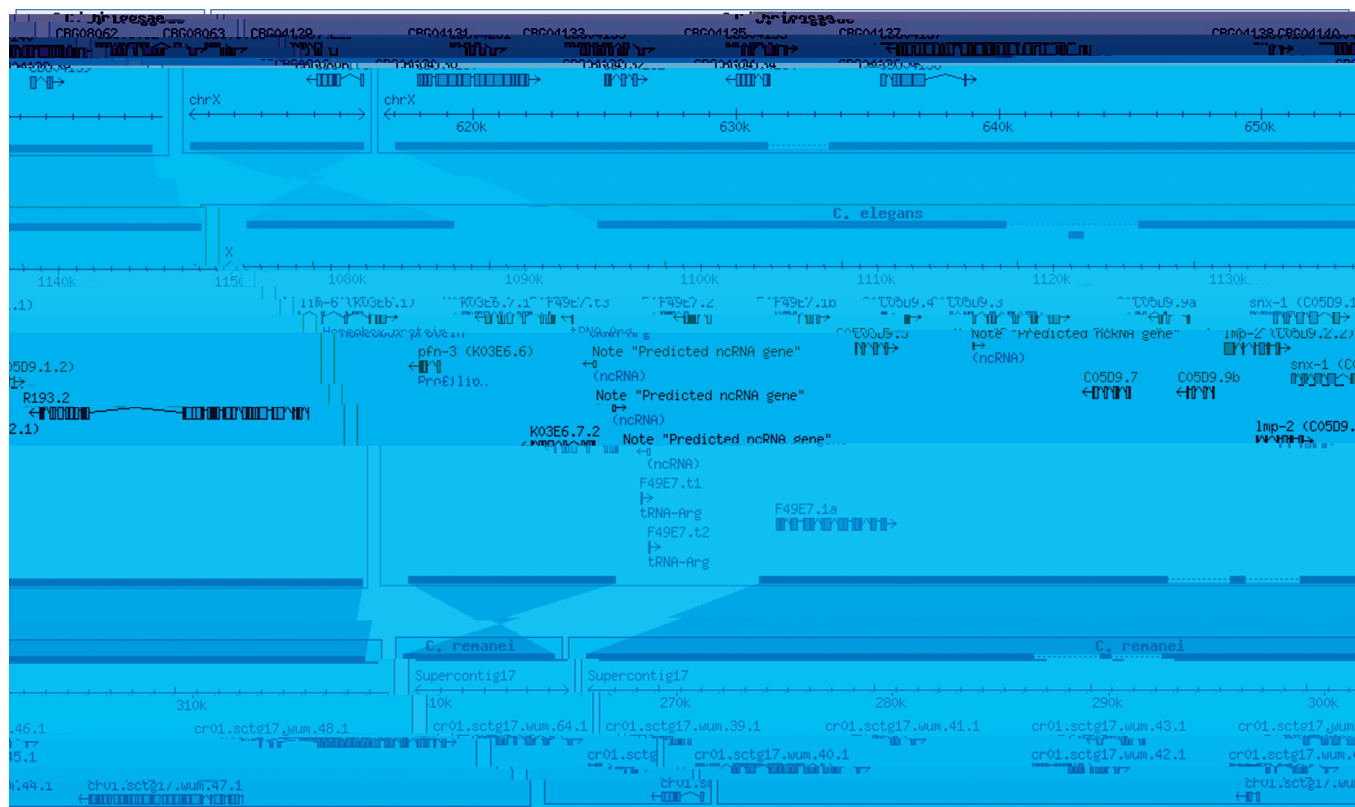
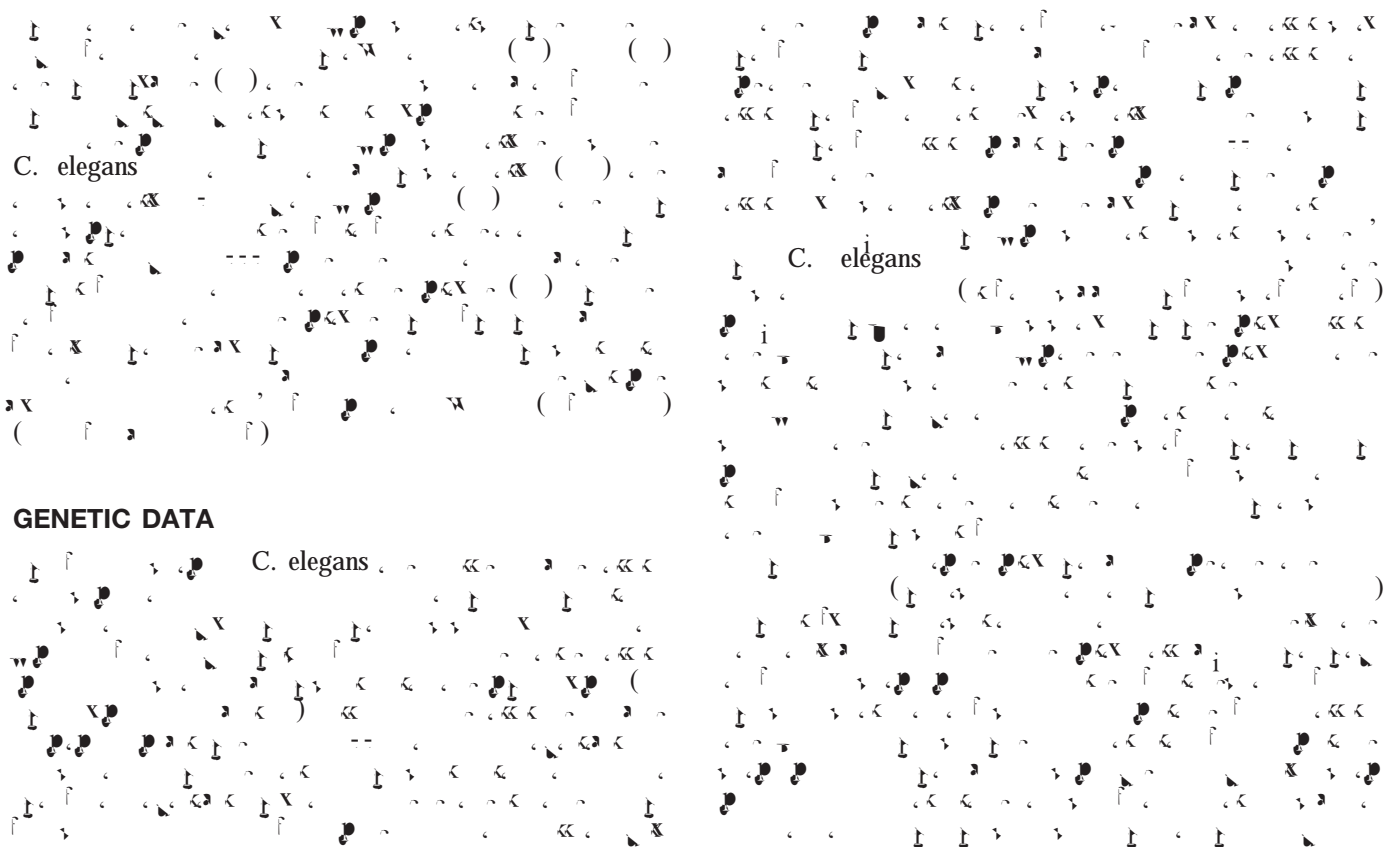


Figure 1. *C. elegans*, *C. briggsae*, and *C. remanei*



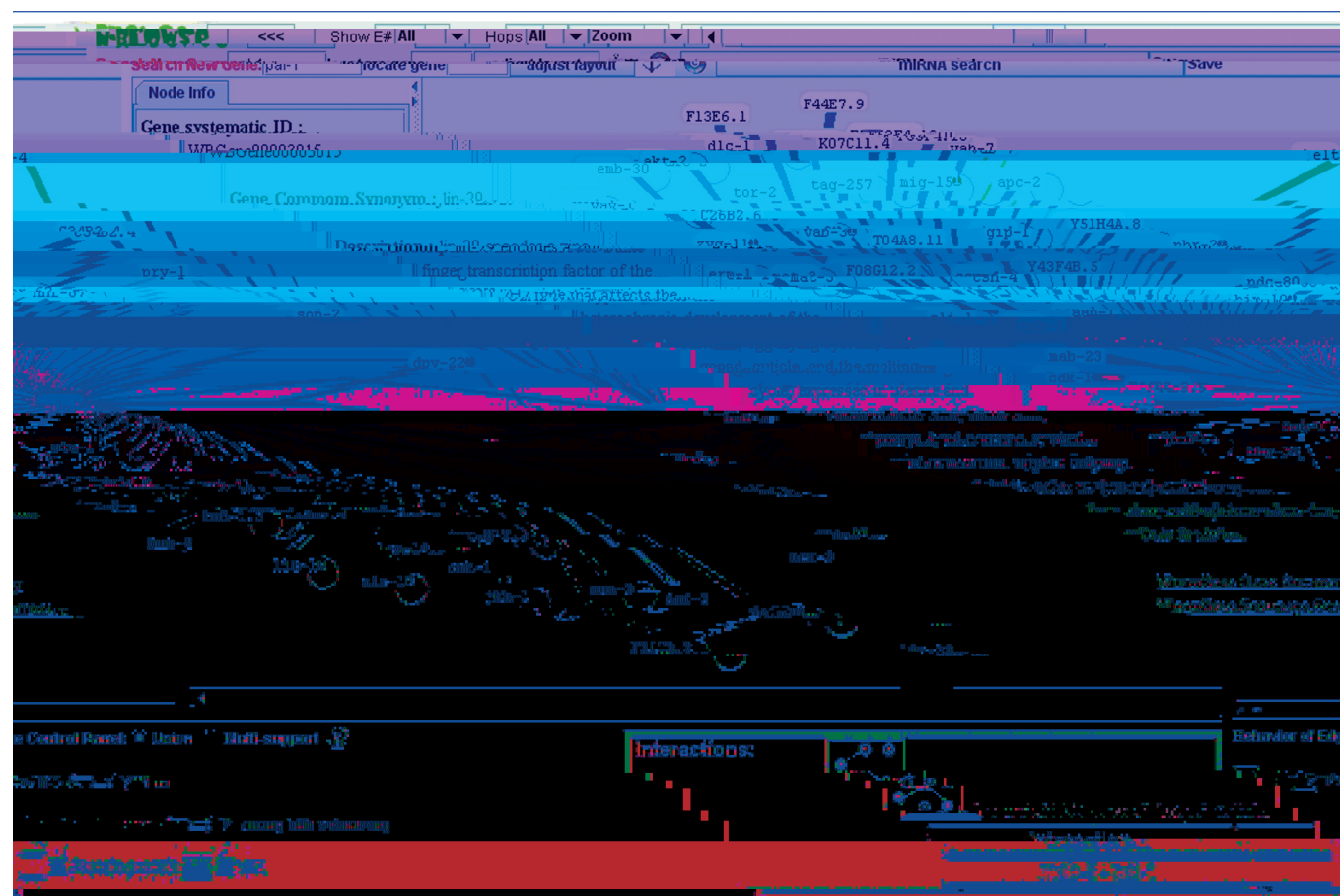


Figure 3. The WormBase database interface showing gene information for F13E6.1 and F44E7.9. The interface displays a complex network of gene interactions, with various gene names like 'd1c-1', 'tag-257', 'mig-150', and 'apc-2' visible. A 'Description' section on the right provides details about the gene's function, mentioning 'a transcription factor of the'. The bottom of the interface features a 'Control Panel' with options like 'Data' and 'Multi-support', and an 'Interactions' section showing a detailed view of the gene's regulatory network.

COMMUNITY INTERACTION

Diagram illustrating community interaction within a network. The network consists of numerous nodes (represented by small circles) and edges (represented by lines connecting the nodes). The nodes are arranged in a complex, interconnected pattern, suggesting a highly dynamic and interconnected community. The edges represent interactions between the nodes, with some nodes having more connections than others, indicating varying levels of activity or influence within the community.

DATABASE ACCESS AND DISTRIBUTION

Diagram illustrating database access and distribution. The network shows nodes and edges, with a central node labeled 'C. elegans' prominently displayed. The nodes are arranged in a complex, interconnected pattern, suggesting a highly dynamic and interconnected community. The edges represent interactions between the nodes, with some nodes having more connections than others, indicating varying levels of activity or influence within the community.

