

WDCM serves as an information infrastructure for the exploration and utilization of microbial strains preserved worldwide

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The World Data Centre for Microorganisms (WDCM) aims to provide integrated information services by fully utilizing hyperlinked big data technology for microbial resource centers and microbiologists all over the world. In this report, we provide an overview of WDCM information platform and services. CCINFO (Culture Collections Information Worldwide) provides metadata information on 834 culture collections from 78 countries and regions. The GCM (Global Catalogue of Microorganism) gathers strain catalogue information and provides a data retrieval, analysis, and visualization system for microbial resources. Now it includes more than 520,000 strains from 151 culture collections in 48 countries and regions. The gcType database provides the most comprehensive genomic information on type strains together with user friendly genomic analysis pipelines. The ABC (Analyzer of Bio-resource Citation) is a data mining tool extracting strain related publications, patents, nucleotide sequences and genomes information from public data sources to form a knowledge base. The RSC (Reference Strain Catalogue) maintains an online database of strains listed in ISO and other international or regional standards. It allocates a unique identifier to strains recommended for use in diagnosis and quality control and hence serves as a valuable cross-platform reference. WDCM hope to further develop these platforms to be an integrated data server by cutting-edge information technology for culture collections and microbiologists all over the world.