

Industrial Microbiology Services Section Front Page

The majority of current biotechnological applications are of microbial origin, and it is widely appreciated that the microbial world contains by far the greatest fraction of biodiversity in the biosphere. Because of their biotech impact, numerous efforts are being undertaken worldwide, with an ultimate goal to deliver new usable substances of microbial origin to the marketplace. However, the direct isolation of microbes always revealed that the majority are not amenable to be cultured and no representatives for many major microbial phyla have been thus far characterized. Therefore, the knowledge on new microbes and/or genomic information thereof, or from their communities, will pose an enormous potential to provide industry with novel products and processes based on the use of microbial resources, and contribute to and extend the basic mechanistic knowledge on the functioning of organisms. The present review highlights some examples and advances in the exploration of the genetic reservoir of (un)cultured microbes for industrial applications.