



Plant Bioinformatics Research Outsourcing Services

Our plant bioinformatics research outsourcing services empower breeders, geneticists, and researchers to decode complex plant genomes, understand gene functions, and accelerate crop improvement using advanced computational tools and data analytics.

Our Plant Bioinformatics Research Capabilities

Our bioinformaticians, computational biologists, and plant genomics experts deliver customized pipelines for de novo assembly, annotation, variant analysis, and multi-omics integration for diverse crops and model plants.

Types of Plant Bioinformatics Research We Handle

- Whole Genome Sequencing and Assembly
- De Novo Transcriptome Assembly
- Gene Prediction and Functional Annotation
- Comparative Genomics and Synteny Analysis
- Ortholog and Paralog Identification
- Gene Family Evolution Studies
- Phylogenomic Analysis
- SSR and SNP Marker Discovery
- Variant Calling and Genotyping
- Differential Gene Expression Analysis
- Pathway Mapping and Enrichment Analysis
- miRNA and ncRNA Prediction
- Chloroplast and Mitochondrial Genome Analysis
- Pan-Genome Construction
- Transcriptome Profiling under Stress
- Epigenomics and Methylation Analysis
- Protein-Protein Interaction Networks
- Gene Co-expression Network Analysis
- Metabolome-Transcriptome Integration
- Trait-Associated Marker Development
- QTL Mapping Support
- GWAS Data Analysis
- Population Genetics Analysis

- Phylogenetic Tree Construction
- Haplotype Block Identification
- Candidate Gene Mining
- Functional Domain Prediction
- Database Development and Curation
- Regulatory-Compliant Bioinformatics Reports
- Custom Plant Bioinformatics Projects

Key Research Outsourcing Services Offered

- Genome and Transcriptome Data QC
- De Novo Assembly and Scaffolding
- Structural and Functional Gene Annotation
- Variant Calling Pipelines
- SNP and SSR Marker Identification
- Pathway and GO Enrichment Analysis
- Gene Family Evolution and Duplication Studies
- Comparative Genomics Tools
- Phylogenetic Analysis Pipelines
- miRNA and ncRNA Pipeline Setup
- Protein Interaction Network Construction
- Expression Data Normalization and Visualization
- Integrative Multi-Omics Data Analysis
- Custom Database Development
- Confidential Data Handling and NDA
- Interim Reports and Project Updates
- Publication-Ready Figures and Tables
- Stakeholder Presentation Support
- Workshops and Training in Plant Bioinformatics
- Post-Project Technical Consulting
- IP and Patent Filing Support
- Grant Proposal and Manuscript Assistance
- Sample Archiving and Data Backup
- Compliance with GLP, GCP, ISO Standards
- Cross-Lab Data Validation and Sharing
- Collaboration with Breeding Programs
- Long-Term Bioinformatics Research Partnerships
- Custom Dashboards for Genomic Data
- Marker Validation and Deployment
- Regulatory Submission Support for Genomic Data

Why Choose Us for Plant Bioinformatics Research

Outsourcing?

Our end-to-end computational workflows deliver accurate genomic insights, support marker-assisted breeding, and accelerate crop improvement with regulatory-ready, high-quality data outputs.

Industries & Sectors We Serve

- Crop Breeding Companies
- Agri-Biotech Firms
- Seed Production and Genetics Companies
- Academic Plant Genomics Labs
- Regulatory and Certification Bodies
- Conservation and Biodiversity Centers

Customized Plant Bioinformatics Solutions

We design and execute tailored pipelines, provide bioinformatics consulting, and deliver user-friendly genomic datasets aligned with your breeding or research objectives.

Quality Assurance & Regulatory Compliance

Our workflows comply with GLP, GCP, ISO, and plant genomics data submission standards to ensure robust, validated, and reproducible results.

Case Studies & Client Success Stories

Explore how our outsourcing services have enabled marker discovery, supported stress tolerance research, and advanced trait selection for modern breeding programs. References available on request.

How It Works: Our Research Outsourcing Process

1. **Requirement Gathering:** Define species, sample type, and bioinformatics goals.
2. **Proposal & Quotation:** Provide detailed plan, pipeline, and cost estimates.
3. **Data Analysis:** Perform assembly, annotation, and multi-omics integration.
4. **Reporting:** Deliver publication-ready datasets and regulatory-compliant reports.
5. **Post-Project Support:** Offer interpretation, manuscript assistance, and marker validation support.

Frequently Asked Questions (FAQs)

Q: Can you design custom pipelines for novel crops?

A: Yes — we adapt pipelines for any plant species or population study.

Q: Do you help with marker validation?

A: Absolutely — we deliver validated SNP and SSR markers for breeding programs.

Q: How secure is sequence data?

A: We guarantee full NDA, encrypted storage, and IP confidentiality.

Get Started / Request a Quote

Contact us today to discuss your plant bioinformatics project and receive a custom plan, timeline, and cost estimate aligned with your breeding or genomics goals.

Contact Us

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