Plant science

Plants are essential to life, providing oxygen, food, fibre, fuel, medicines, and ecosystem services. However, global food production faces growing pressure from population growth, climate change, extreme weather, pests, and diseases, while relying heavily on a small number of major crops.

Plant science researchers work across genetics, biotechnology, ecology, breeding, physiology, and genomics to improve plant resilience, productivity, and sustainability. Using advanced tools such as bioinformatics, genome editing, and CRISPR technology, they develop new crop varieties with enhanced yield, climate resilience, and resource efficiency.

Researchers also investigate plant-microbe interactions, soil health, and plant adaptation to changing environments to support sustainable agriculture and ecosystem restoration. Through collaborations with industry, government, farmers, and research organisations, UQ scientists deliver innovative solutions that strengthen food security and advance plant science on a national and global scale.

Researchers

Professor Elizabeth Adkins
Professor Christine Beveridge
Professor Jimmy Botella
Dr Peter Crisp
Professor Brett Ferguson
Dr Linh Hoang
Professor Bhagirath Chauhan
Dr Suresh Krishnasamy
Mr Johannes Biala
Professor Sagadevan Mundree
Emeritus Professor Neal Menzies