

Soil science

Soil health is fundamental to food security, environmental sustainability, ecosystem resilience, and climate change mitigation. As agriculture, land-use change, and climate pressures increase, soil scientists are developing innovative solutions to address challenges such as nutrient depletion, erosion, salinity, contamination, and soil degradation.

At UQ, researchers integrate expertise in soil chemistry, physics, biology, microbiology, and ecology to better understand soil processes and develop practical approaches for sustainable land management. Their work supports healthier soils, improved agricultural productivity, and stronger environmental outcomes.

Working closely with farmers, industry, government, policymakers, and community organisations, UQ researchers translate scientific knowledge into real-world solutions. Through new technologies, management practices, and evidence-based policy development, they are helping restore degraded land, strengthen agricultural resilience, and support climate change adaptation and mitigation.

Researchers



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