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SOUTHERN AND INDIGENOUS PERSPECTIVES ON INNOVATIONS AND
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**CLARIFYING UTAUT IN PLANT PRODUCTION: A SYSTEMATIC REVIEW OF
AGRONOMIC AND BIOLOGICAL PRACTICE ADOPTION STUDIES**

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Practice adoption in plant production often involves cumulative change and repeated enactment over time. Among behavioural adoption studies in this domain, the Unified Theory of Acceptance and Use of Technology (UTAUT) is a recurrent construct vocabulary. UTAUT and its extensions were developed primarily to explain acceptance and use of discrete technologies. This review examines how UTAUT models are translated into empirical models of agronomic and biological practice adoption in plant and crop production, rather than a discrete information technology, with attention to construct operationalisation, construct meaning, and adaptation patterns.

A systematic search of Scopus and Web of Science (26 December 2025), in line with PRISMA 2020, retrieved 243 records, from which 20 empirical studies met

eligibility criteria and were synthesised using a qualitative framework synthesis based on structured extraction of model claims, implemented construct sets, and measurement traceability. Eligible studies were empirical plant production practice adoption studies using UTAUT. Appraisal focused on transparency and construct fidelity. Heterogeneity precluded meta-analysis. The review protocol was not registered.

Across the corpus, UTAUT was typically used as a flexible construct vocabulary rather than a standardised specification. Studies frequently operationalised only subsets of the four core constructs, and construct meanings often shifted when mapped to practice adoption settings. Extensions clustered around attitudinal and agency beliefs, moral and normative motivations, risk and trust, economic value and cost, capability and institutional support, innovativeness, and practice attributes and outcomes. Outcomes ranged from behavioural intention to use, adoption intensity, and switching readiness, reflecting heterogeneous decision structures.

Future studies would improve comparability by clearly distinguishing claimed variants from implemented construct sets, reporting construct definitions and measurement traceability, explicitly specifying adoption outcomes and decision structures, and being transparent about moderator choices.

Palavras-chave: utaut; agronomic practice adoption; behavioural intention and use; qualitative framework synthesis; systematic review.