

Supplementary File

Table S1. Characteristics and Details of Included Studies.

Author(s)	Year	Author Country(s)	Country in which the study was conducted	Type of Study	Study Design	Data Collection Method	Food Production Stage	Causes of Food Waste
Klein and Thorp	1987	New Zealand	South Pacific	Experiment	Quantitative	Experiment	Post harvest	Storage; Technology limitations; Production limitations
Epps	1995	Australia	Australia	Case study	Mixed Methods	Secondary Data Analysis	Not included	Climate; Weather; Other: Product contamination
Johnston et al.	2005	New Zealand, Belgium, Scotland	New Zealand	Experiment	Quantitative	Experiment	Post harvest	Transport; Storage; Other: Delayed cooling and intermittent cooling
Ray and Ravi	2005	India	Other:	Review	Qualitative	Document Analysis; Secondary Data Analysis	Pre-harvest; Post-harvest; Other: Storage/transport	Pests; Transport; Storage
Renquist et al.	2005	New Zealand	New Zealand	Experiment	Quantitative	Experiment	Post harvest	Weather; Transport; Storage; Other
Jacometti et al.	2007	New Zealand	New Zealand	Experiment	Quantitative	Experiment	Pre-harvest	Weather; Soil degradation; Pests; Technology limitations
Buenz and Fuatai	2008	Samoa, USA	Samoa	Case study	Mixed Methods	Survey/Questionnaire; Experiment; Other: Market analysis	Processing; Retail (consumer level)	Other: Seasonal oversupply
Carew et al.	2008	Canada, United States	Canada, U. S	Case study	Quantitative	Case Study(s); Secondary Data Analysis	Post harvest	Consumer preferences
Chaudhry et al.	2008	United Kingdom	N/A	Review	Mixed Methods	Secondary Data Analysis	Processing; Distribution; Retail (consumer level)	Storage
Chandra	2009	Australia	Other: global review	Review	Qualitative	Document Analysis; Secondary Data Analysis	Other: Not related to food waste	Not included
Bunt and Leakey	2012	Australia	Other: Papua New Guinea, Solomon	Case study; Other: Market research,	Mixed Methods	Survey/Questionnaire; Interview; Observation	Other: N/A	Other

			Islands, and Vanuatu	participatory appraisal				
Carter et al.	2012	New Zealand	New Zealand	Experiment; Other: Comparative varietal trial	Quantitative	Experiment; Longitudinal Study	Other: N/A	Other
Kingston et al.	2012	New Zealand	New Zealand	Experiment	Quantitative	Experiment	Harvesting; post-harvest	Other: Mechanical damage
Billington et al.	2014	New Zealand	Other	Review	Qualitative	Document Analysis; Secondary Data Analysis	Processing; Distribution; Retail (consumer level)	Transport; Storage; Food safety standards; Regulations; Technology limitations; Production limitations
Chareekhot et al.	2015	Thailand	Thailand	Experiment	Quantitative	Experiment	Post harvest	Storage; Consumer preferences; Other: Indirect causes of waste-cultivar suitability
Tucker and Farrelly	2016	New Zealand	New Zealand	Other: Observational study	Quantitative	Survey/ Questionnaire	Retail (consumer level); Other: Household consumption, disposal	Other: Purchasing habits, storage, labelling
Addinsall et al.	2016	Australia	South Pacific	Other: Conceptual research	Qualitative	Other: Build on current literature	Climate; Weather; Soil degradation; Other	Other: Economic development strategy-agritourism redefined
Addinsall et al.	2017	Australia	Vanuatu	Case study	Mixed Methods	Interview; Secondary Data Analysis; Other: Participatory-Semi-structured interviews, community discussions and stories.	Pre-harvest	Other: An analysis of rural Ni-Vanuatu smallholders' livelihoods located in Bay Homo CCA, South Pente-cost
Ahmed et al.	2017	Canada, Australia, USA	Other	Review	Qualitative	Document Analysis; Secondary Data Analysis	Pre-harvest	Climate; Water quality; Production limitations
Romanazzi et al.	2017	Italy, Mexico, South Africa	Other:	Review	Qualitative	Document Analysis	Post-harvest; Retail (consumer level)	Weather; Other
Doymaz	2018	Turkey	Turkey	Experiment	Quantitative	Experiment	Post harvest; Processing	Storage
Gray et al.	2018	New Zealand	Tonga	Case study	Qualitative	Interview	Pre-harvest; Harvesting	Climate; Weather

Haylock and Connelly	2018	New Zealand	New Zealand	Case study	Qualitative	Interview; Document Analysis	Other: system level	Other: Policy/planning
Huambachano	2018	USA	Other: New Zealand and Peru	Other	Qualitative	Interview; Focus Group; Other: workshops, talking circles	Other: Not specific to food waste	Other
Levin	2018	USA	Micronesia	Other: Ethno-archaeological	Mixed Methods	Observation; Document Analysis; Secondary Data Analysis; Other: Archaeological survey/excavation and analysis, soil sampling and analysis	Other: Not specifically related to food waste-more preservation techniques	Storage; Shelf life
Bryceson and Ross	2019	Australia	Other: Tonga and Solomon Islands	Case study	Qualitative	Survey/Questionnaire; Interview; Observation	Other: better design of aid	Other
Acquah et al.	2020	Canada, Australia and New Zealand	N/A	Review	Qualitative	Document Analysis; Secondary Data Analysis	Other	Other
Aschemann-Witzel et al.	2020	Denmark	Denmark	Review	Mixed Methods	Secondary Data Analysis; Other: The selection was restricted to scientific peer-reviewed journal articles published in the past 5 years.	Consumer preferences	Labelling; Other: Consumer perception
Barrios et al.	2020	Italy, Kenya, USA, New Zealand, Argentina, France, The Netherlands	Other: Agroforestry worldwide, public food procurement in Brazil and the United States of America, and agroecology education vis-À-vis secure access to land in Senegal.	Review	Qualitative	Document Analysis; Other: Framework development	Other: Food systems	Other: General comments about reducing food waste
Bottcher et al.	2020	Australia, Solomon Islands	Soloman Islands	Other: Observational cross-sectional study	Quantitative	Observation	Not included	Not included

Vieira et al.	2020	Australia, New Zealand	Australia	Case study	Quantitative	Interview	Other: System-wide	Climate; Transport; Overproduction; Labour issues; Consumer preferences; Other
Berno et al.	2021	New Zealand, Timor-Leste	Other: Timor-Leste	Case study	Qualitative	Interview; Focus Group; Other	Other: N/A	Other: N/A
Chamnan et al.	2021	Thailand	Other: Thailand	Experiment	Quantitative	Experiment	Post harvest	Storage; Other: Pathogens
Cook et al.	2021	Australia, South America	Australia	Review	Qualitative	Document Analysis; Secondary Data Analysis	Other	Other
Curci et al.	2021	Italy, Croatia	Global review	Review	Mixed Methods	Document Analysis; Secondary Data Analysis	Processing	Technology limitations; Other
Garden et al.	2021	New Zealand	New Zealand	Case study	Qualitative	Interview; Document Analysis; Secondary Data Analysis; Other: Meetings, hui (a gathering/meeting)	Other: food-related activities	Overproduction
Sakandar et al.	2021	China, Pakistan	Not specified	Review	Qualitative	Document Analysis; Secondary Data Analysis	Processing	Storage
Bhatt et al.	2021	USA	Other: USA	Experiment	Mixed Methods	Survey/ Questionnaire	Processing; Retail (consumer level)	Consumer preferences; Other: Portions of product usually considered as waste
Ghaffari-Bohlouli et al.	2022	Belgium, Denmark, Iran, New Zealand, China, Czech Republic	Other: global	Review	Qualitative	Document Analysis; Secondary Data Analysis	Processing	Consumer preferences; Technology limitations; Production limitations; Other: Public perception
Kahramanoğlu et al.	2022	Turkey, South Africa, China	Other:	Review	Mixed Methods	Secondary Data Analysis	Post harvest	Storage; Food safety standards; Consumer over-purchasing; Consumer preferences; Other
Mahilum et al.	2022	New Zealand	New Zealand	Experiment	Quantitative	Experiment	Post harvest	Storage
Al-Sakkaf	2022	New Zealand	Other: New Zealand, Canada, and USA involved in stages of experiment	Experiment	Quantitative	Experiment	Retail (consumer level)	Food safety standards

Bhattacharya et al.	2022	Australia	Other:	Review	Qualitative	Document Analysis	Distribution; Retail (consumer level); Other: households	Transport; Storage; Food safety standards; Regulations; Labour issues; Consumer over purchasing; Consumer preferences
Fawole et al.	2022	South Africa, Nigeria	Other: South Africa	Experiment	Quantitative	Experiment	Post-harvest; Processing	Storage
Mirosa	2022	New Zealand	Other: Australia and New Zealand	Review	Conceptual	Secondary Data Analysis	Other	Transport; Storage; Overproduction; Consumer preferences
Chowdhury et al.	2023	India and USA	Other: Global study	Review	Mixed Methods	Document Analysis; Secondary Data Analysis	Other	Other
Klerkx et al.	2023	Chile, Netherlands, New Zealand	New Zealand	Case study; Other: Conceptual paper	Qualitative	Secondary Data Analysis	Pre-harvest; Harvesting; Post harvest; Processing; Distribution; Retail (consumer level)	Climate; Other: Social inequality
Prihanto et al.	2024	Not included	Other: Indonesia	Experiment	Quantitative	Experiment	Other	Other
Antony et al.	2024	United Kingdom, India, United Arab Emirates, USA	Other:	Review	Qualitative	Document Analysis	Processing	Food safety standards; Regulations; Technology limitations; Production limitations
Lomavatu et al.	2024	Fiji, Australia	Fiji	Case study; Experiment	Mixed Methods	Interview; Observation; Case Study(s); Experiment	Pre-harvest; Post-harvest	Pests
Madhavan et al.	2024	India	Other:	Experiment	Quantitative	Experiment	Post harvest	Storage
Molimau-Samasoni et al.	2024	Samoa, Australia, New Zealand	Samoa	Experiment	Quantitative	Experiment	Post-harvest; Processing	Pests; Other: Heat Treatment
Gao et al.	2024	China	Other: China	Experiment	Quantitative	Experiment	Post harvest	Weather; Transport; Storage
Jalloul et al.	2024	Tunisia	Other: Tunisia	Experiment	Mixed Methods	Experiment; Other: Sensory evaluation	Processing; Retail (consumer level)	Storage
Quirk et al.	2024	Australia	Australia	Case study	Qualitative	Interview; Observation; Document Analysis	Retail (consumer level)	Consumer over-purchasing; Other: food waste generation from food service

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