

BPA Funded Research Projects (May 2022)

(For information about specific projects, please contact Anna Yallop, BPA General Manager: 021 799 314,

anna.yallop@bioresourceprocessing.co.nz)

Key: CI (Callaghan Innovation), AgR (AgResearch), PFR (Plant & Food Research)

BPA funding req No#	Project Name/Description	CRI/Uni Lead
2	Overview of water removal technologies	CI
4	Virtual pilot plant database generation	CI
5	DAF and MBM value adding value processing	CI
6	Higher value uses for Pinus Radiata Sawdust	Scion
8	Mapping of Product and Waste streams for meat, wool and dairy processing	AgR
9	High Value biomaterial products from animal proteins	AgR
10	Tomato as a feed ingredient	PFR
10 B	Tomato as a feed ingredient Part 2	PFR
11	Value from <i>Undaria</i> (aquaculture seaweed by-product)	PFR
12	Extracting compounds from vegetable waste	PFR
13 A and B	Weed Suppressant	PFR
14	Downstream processing	Scion
15 A and B	Development of rapid assessment tools-hydrothermal processing	Scion
17	Optimisation of PHA production using new substrate	Scion
19	Solvent separation technologies for natural food and health products	CI
20	DAF lipid biotransformation	CI
21	Fruit fibre drying - Avocado powder for food and nutraceuticals	CI
23	Extraction of Soluble Proteins from Meat By-products	AgR
24	Novel and straight forward method for processing deer tails	AgR
25	Rugs to Riches	AgR
26	Protein from a meat processing by-product	AgR
27	Bovine blood project	AgR
28	Aspen Integration	Scion
30 A and B	Opportunities II - Fruit and Vegetable Processing Waste Part 2	PFR
32	Towards continuous recovery of cholesterol	AgR
34	Use of <i>Undaria</i> (aquaculture seaweed by-product) Part 3	PFR
35	Cross sector Waste Opportunities I: Animal and Mineral	CI
36	PHA Biopolymer production from hydrothermal liquors	Scion
37	Simple sugar from fruit project	CI
38	Animal Feed from plant sourced	Scion
39	Slow-release fertilisers	Scion
40	Sweetcorn powder	CI
41	Animal feed: Literature review and feasibility study	Scion
43	New Uses for Hydrochloric Acid	Scion
44	High value foods from <i>Undaria</i> – Phase1	University
46	Impacts of processing storage methods on quality <i>Undaria</i>	PFR
49	Biofuels from Bark	Scion
50	Mussel Opportunity analysis	PFR
51	Mussel scoping study	PFR
52 A and B	Weed suppressant part 3 Business case Assessment	AgR
53	Invasive pest species on mussel lines (<i>Undaria</i>)	PFR
55	Raw material to support the growth of a new seaweed industry	PFR
57	PhD: Modelling and Simulation of Hydrothermal and Wet Oxidation processes on Aspen Plus	University
58	PhD: Substrates for development of new food products using fruit and vegetables	University
59	Masters: Commercializing polyphenol rich extracts from fruit and vegetable streams	University
60	Internship: Anaerobic fermentation of municipal solid waste and wet oxidation liquors	University
61	Internship: Tannin Pilot Plant	University
62	Internship: Optimisation of PHA production using new liquor as substrate	University
63	Masters: Anti-bacterial properties of honey raw material	University

64	PhD: Recovering bioactive compounds and aroma precursors from grape pomaces	University
65	High value bionanomaterials	University
66	Biofuels: bark briquettes	Scion
67	Extractives from bark	CI
68	Scoping waste streams and water usage of a meat processor	CI
71	Effluent for Fire-Fighting: Textile Flame Retardant	AgR
72	Pilot scale trial study of dairy DAF	CI
73	Stock feed opportunities	CI
74	Marine-sourced Oil	PFR
75	PHA Biopolymer Production from processing residues	Scion
76	Bioactive proteins and peptides from dairy sources	AgR
77	Olive pomace valorisation	CI
78	Recovery of additional value from vegetable streams	CI
80	Alternative product opportunities from meat processing plant	CI
82	Effluent For Fire Fighting: natural textile flame retardant	University
88	Avocado 2 (skin and stone opportunities)	CI
91	Ginseng by-products v2	CI
94	Internship: Factors Affecting Rheological Characteristics of Putrescible Food Waste	University
95	Internship: Evaluating the potential for fungal biotechnology in NZ	University
97	Internship: Development of Aspen and Matlab dynamic models for fermentation	University
98	Internship: Bacterial biotransformation of waste material	University
101	High value foods from mussel processing streams – Phase1	University
102	Potato food product - stage 1	PFR
107	PhD: Conversion of low value co-product streams (dairy) into added value biomaterials by novel technologies	University
109	Fisheries by-product assessment	PFR
110	Feijoa extract	CI
112	PhD: Wet Oxidation of Biomass Fundamental Investigation	University
117	Slow release fertilisers	Scion
118	Developing Digestate and Biofuels using Anaerobic Digestion	Scion
119	Rumen project	AgR
120	Chop Shop (protein from meat processing by-product)	AgR
122	Nutraceutical and Cosmetic Products derived from Processing Plant	PFR
125	DAF 3 (Dissolved Air Flotation from dairy plants)	CI
126	PhD: Effect of indolicidin	University
127	High value extracts from onion skins	PFR
128	Olive pomace valorisation stage2	CI
130	PhD: High value compounds from food product	University
131	PhD: Collagen project	University
135	Bioconverting organic waste into ingredients (Black Soldier Flies)	PFR
136	Adding value to recovered animal hair	AgR
137	Cathelicidin	AgR
139-2	Biofuels using torrefaction of wood by-products	Scion
141	Using brewery by-products for pet treats	AgR
145	Techno-economic assessment of wood molasses	Scion
146-2	Bark briquette biofuels Product Development and Market Analysis	Scion
149	Transforming Potatoes into High Value Products	PFR
151	Making Pet Food Ingredients	PFR
152	Internship: Ecoshark 1	PFR
153	Internship: Ecoshark 2	PFR
154	Masters: Methane Feed Source for Microbial Fuel Cells	University
156	Salmon by-products into pet food	University
157	PhD: Fermentation Derived Aroma Compounds	University
162	Kiwifruit Processing and Products (skin, seed and pulp extracts)	CI
163	Internship: Egg Powder for Protecting Wool from Insects	University
167	Improved Composites using paua shells	Scion
168	Masters: Sheep Milk Whey into new ingredients	University
169	High Value Pet Treats from Fish - Stage 1	University
172	Rendering Meat by-products into High Value protein Product	AgR
172-02	Protein product from meat processing - extension trials	AgR
174	Apple Seed extract	CI

175	Feed potential from trees	Scion
177	Manuka by-product oppportunities	Scion
178	Slow release fertilisers (2)	Scion
180	Dairy Derived By-products	CI
1501-03	Bioconverting Organic Waste Business Case (Black Soldier Flies)	PFR
1503-02	Vanilla Opportunities	PFR
1503-03	Vanilla Project (related)	PFR
1506-02	DAF extension project (dairy factory streams)	CI
1603-01	Bionanomaterials from Protein Wastes	University
1606-01	DAF Projects (x2) - dairy factory by-products	University
1607-01	Cathelicidin (2)	AgR
1608-01	Culture Media Peptones	University
1610-01	Polyphenols Separation using proteins	University
1611-01	Bioconverting Organic Waste - mass rearing Black Soldier Flies	University
1705-01	Lithium-ion Batteries with secondary streama	CI
1706-01	Shellfish by-products into new product opportunities	PFR
1707-01	Pea starch project	AgR
1709-01	Added value for poultry litter	Scion
1710-01	Apple Pomace into new products	PFR
1711-01	Pet foods from Meat-By-products	AgR
1712-01	Ginseng By-products (2)	University
1717-01	Squash Products	CI
1720-01	Added Value from Sawdust and Forest Residue	Scion
1801-01	Feed Stock for Snapper using by-products from aquaculture	University
1802-01	Kiwifruit Processing Project (kiwifruit 'dust')	Scion
1803-01	Oats Project for a range of products	Scion
1804-01	Kiwifruit Post-Harvest Opportunities	University
1805-01	Pine Woodwaste Conversion into new products	Scion
1805-02	Sawdust-derived molasses for new product	Scion
1807-01	Kiwifruit Flowers	Scion
1809-01	Protein recovery from seed sakes	PFR
1810-01	Blood Project	AgR
1814-01	High Value Products from Sawdust	Scion
1815-01	Pet Food Project using meat by-products	AgR
1816-01	Pet Food Project using meat processing stream	AgR
1817-01	Fire Retardant from brewing by-products	Scion
1818-01	Cathelicidin (related project)	AgR
1819-01	Flour Project	PFR
1820-01	Hemp Project (harvesting for fibre)	AgR
1822-01	Mussel By-products into products	CI
1825-01	Apple and Kiwifruit Characterisation	PFR
1826-01	3x Seafood Process Development Project	PFR
1827-01	Seed Oil Scale-up	CI
1828-01	Solid fuels from wood residues	Scion
1829-01	Pork Project	AgR
1901-01	Kiwiberries Project	PFR
2004-01	Post Doc: Collagen project	University
2008-01	Feijoa secondary stream project	PFR
2009-01	Biochemicals from Biomass	Scion
2016-01	Extraction and Characterisation of Mussels	AgR
2017-01	Olive Mill Bioresource	CI
2018-01	Biochar from Wood and Boiler Ash	Scion
2021-01	Conversion of Apple Processing By-products into a range of products	CI
2023-01	Conversion of Citrus Processing By-products into multiple products	CI
2024-01	Added-value Avocado Products	CI
2025-01	Arable Resource Utilisation Study	Scion
2027-01	PhD: Melanosomes from animal by-products	University
2033-01	Grape By-product into supplements	PFR
2034-01	Bioconversion of one Meat Industry Sidestream	PFR
2035-01	Collagen Product	University

2035-02	Collagen Product (next stage)	University
2102-01	Dyes from horticultural streams	AgR
2103-02	Collagen from new species	AgR
2104-01	Bioplastic from food by-product	PFR
2105-01	Advanced functional materials from dairy waste	AgR
2107-02	Logistically Optimised Animal Feed (mapping by-products regionally and developing feeds)	PFR
2110-01	Crayfish opportunities	PFR
2111-01	Native species by-product use	AgR
2112-02	MsC: Spent brewers' yeast opportunity for personal care products	University
2113-01	Hydrogels from seaweed processing by-products	Scion
2114-01	Biopolymer Development	Scion
2117-01	Hemp products from oil	CI
2118-01	Marine collagen product	CI
2119-01	PhD: Converting fish and dairy by-products into polymers	University
2120-01	New tool for encapsulation from meat processing stream	AgR
2122-01	Utilisation of hops	PFR
2129-01	Grape marc for high value feed	AgR
2130-01	Deer by-products for new products	AgR
2132-01	Avocado seeds and skins opportunities	CI
2133-01	Marine collagen for food products	PFR
2136-01	Characterisation and utilisation of cherries	PFR
2138-01	Hemp/cannabis whole plant utilisation	CI
2140-01	Vegetable-derived new food product	University
2141-01	Intern: Sustainable is Attainable - Hawkes Bay - options for food by-product streams	University
2142-01	Intern: From Surf to Turf	AgR
2143-01	Intern: Materials from wool	AgR
2144-01	Intern: 3D printing using meat processing streams	AgR
2145-01	Intern: Biomaterials from low value streams	AgR
2146-01	Natural dyes from horticultural streams	AgR
2201-01	Marine product into new high value use	CI
2202-01	Biogas and digestate from Anaerobic Digestion	Scion
2203-01	Sheepskin opportunities	Scion
2204-01	Intern: New carbon fibres using forestry streams	Scion
2206-01	3D printing foods	AgR
2208-01	Intern: Design optimisation for bio-processing	University
2210-01	New opportunities with fruit by-products	PFR
2212-01	Biochar systems assessment	Scion
2213-01	New product opportunities using blueberries	PFR
2216-01	Hemp - high value opportunity from secondary streams	Scion
2217-01	Pumpkin stream new product development	CI