| DATA SCIENCE | LINLEY JESSON  ADD NAME OF BUSINESS MANAGER/S |
| --- | --- |
| Outcome More sustainable and profitable systems Impact Indicators Maintained and/or increased crop volumes, value and profitability  New Zealand’s productive environments sustained or enhanced, generating products with verifiable reduced footprints to maintain and/or increase market access Science Targets Whole systems modeling and prediction platform.  Tools developed for eco-verification, footprinting and traceability (water, carbon, greenhouse gases, soil, biodiversity, pesticides, social equity).  Improved production technologies and cultivars based on scaled up knowledge from molecular, physiological, soil, water and environmental science, integrated with system science. Impact Highlight Give an example **here** of progress towards delivery of impact through a SIGNIFICANT science achievement. This is the major part of the report and should be a paragraph or two in length. OutputsPeer-reviewed Publications List **here** in order of most significant with authors’ names, date, title, journal names, page numbers:  {example journal article}Walker S, Prescott J 2003. Psychophysical properties of mechanical oral irritation. Journal of Sensory Studies 18(4): 325-345.  {example book chapter}Kimball B 2011. Lessons from FACE: CO2 effects and interactions with water, nitrogen and temperature. In: Hillel D, Rosenzwig C eds. Handbook of climate change and agroecosystems: Impacts, adaptation, and mitigation. London, U.K., Imperial College Press. Pp. 87-107.  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx  Wang, R., Guerin-Laguette, A., Butler, R., Huang, L.-L. & Yu, F.-Q. 2019. The European delicacy Tuber melanosporum forms mycorrhizae with some indigenous Chinese Quercus species, and promotes growth of the oak seedlings. Mycorrhiza, 13. Published online 23/11/2019. https://doi.org/10.1007/s00572-019-00925-y Client Reports List **here** in order of most significant with authors’ names, including title, client name:  {example client report}Shaw SA, Edwards CM, Green S 2012. Central North Island blueberries: environmental impact and plant response. A Plant & Food Research report prepared for Hauhungaroa. Milestone No. 12. Contract No. 20937. SPTS No. 1234.  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx  Johnston, P., Butler, R., Meiyalaghan, V. & Hay, A. 2019. 2019 Summary of Forage Oat Breeding. A Plant & Food Research Report prepared for Forage Innovations Limited (FIL). SPTS No. 18784. 12 p Products introduced to Market and adopted by End Users List **here** including licences, patents, software:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Technologies and Services introduced to Market and adopted by End Users List **here** including new processes:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx International and Significant National AwardsInternational Awards List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx National Awards List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Invitations to participate on International and Significant National CommitteesInternational Committee Invitations List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx National Committee Invitations List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Invitations to participate on Editorial BoardsInvitations to boards of any journals in which Plant & Food Research publishes List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Invitations to Boards of other Journals List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Invitations to present Keynote Addresses at Significant International or National Conferences or MeetingsInternational Invitations to present Keynote Addresses List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx National Invitations to present Keynote Addresses List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Presentations given at International or National Conferences or MeetingsInternational Presentations List here:  {example conference proceeding}Costa G 1999. Kiwifruit orchard management: New developments. Proceedings of the Fourth International Symposium on Kiwifruit, 11-14 January 1999, Santiago, Chile. Pp. 111-125.  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx  Chng, S., Warren, R., Drummond, J., Thompson, S. & Butler, R. 2019. Trials and tribulations – Ramularia leaf spot of barley in New Zealand. Australasian Plant Pathology Society Conference, 25-28 November 2019, Melbourne, Australia.  Drayton, G.M., Addison, S.M., Butler, R. & Frampton, R.A. 2019. Differences in the acquisition of Candidatues Liberibacter solanacearum by two New Zealand tomato potato psyllid genotypes. Australasian Plant Pathology Society Conference. [Poster], 25-28 November 2019, Melbourne, Australia  Sullivan, N.J., Bell, V.A., Wallis, R., Butler, R.C., Manning, L.M., Twidle, A.M. & Suckling, D.M. 2019. Optimising a combined mealybug pheromone lure for use in New Zealand vineyards. Australian Entomology Conference. 1-4 December 2-19, Brisbane Australia National Presentations List here:  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx Capability Developed List **here** (e.g. professional training completed, new staff, PhDs and MScs completed):  Xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxx A New Opportunity on the Horizon being developed in relation to Impact Targets Add **here** any comments to identify new opportunities for investment New Māori Engagement Project Briefly describe any new projects being undertaken with or for Māori partners, outlining who the project is with or for, funding amount and source and the expected impact of this work. | |