

# Te Ara Paerangi Future Pathways Green Paper Submission

Science Publications Office (Dr Anne Gunson) & Knowledge Services teams (Jenny Botica-Beale):  
Library (Jane Clayton); Knowledge Navigation (Claudia Adams); Information and Records (Anthony  
Yelcich)

The New Zealand Institute for Plant and Food Research Ltd

## Introduction

This submission is supplementary to the more overarching one being presented by Plant & Food Research, and is focused solely on an aspect of the Research Infrastructure topic that is specifically relevant to the teams making this submission.

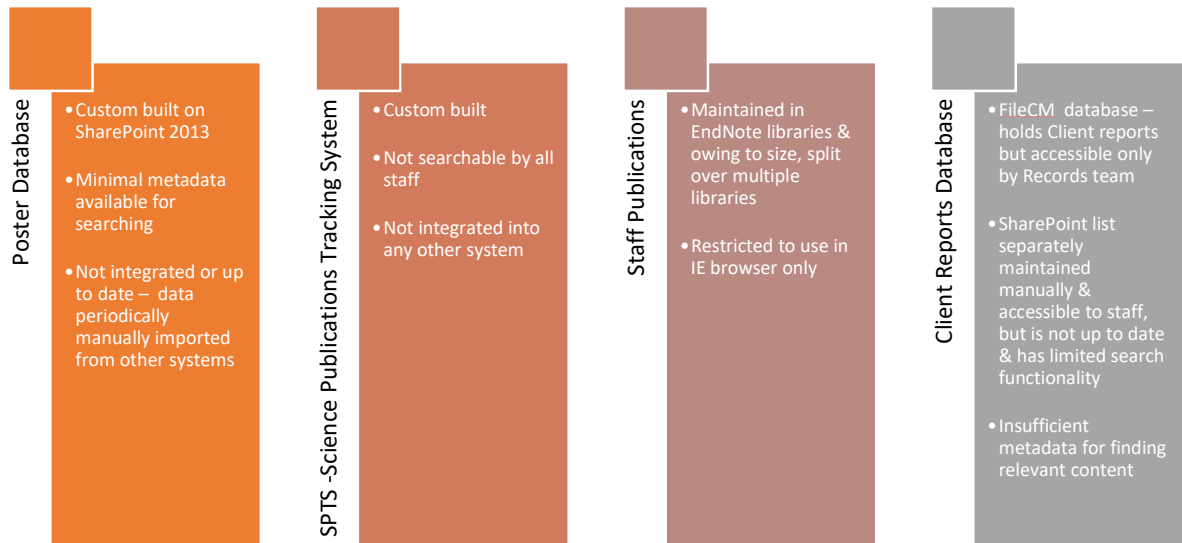
CRIs currently have a variety of systems and processes in place to manage the quality and confidentiality of publications and reports. Having one system or platform across all CRIs, for all forms of publication, to store and search content, would benefit our organisations to manage their outputs. If accessible by the public and external researchers, such a platform could help raise the profile of CRI research efforts outside these organisations. This also supports the one-front-door concept.

Plant & Food Research has a rigorous process, with a professional support team dedicated to supporting authors' outputs through editing and checking of scientific quality. Various systems are used to manage the process from draft stages to holding metadata records of outputs.

Using Plant & Food Research as an example to indicate the issues that arise, may provide an opportunity to provide a single efficient and effective solution that can support all CRIs.

## The problem

- » It is difficult for individuals or support staff to source all published and non-published works that teams or individuals need for their research and to report outputs e.g., for commercial end-users, for funding applications (especially to MBIE), and for career and performance review purposes.
- » When information about Plant & Food Research outputs is required for undertaking new research, or adding to existing research programmes, sourcing this information is complicated, time-consuming, ineffective and potentially, incomplete. It also results in expensive duplication of effort.
- » Existing systems are not enabled to export data into reference management systems efficiently.
- » Metadata and/or open access publication outputs by various CRIs are not visible to local or global audiences, whether these interested parties are scientific, industry-based, or members of the public.
- » Within Plant & Food Research alone, there are multiple systems that hold this information and that have different functions. They do not integrate, are not sufficiently flexible/nimble, and they lack metadata consistency and authority control (example in figure below).



- This results in a duplication of efforts by various parties to locate and compile information.
- Added to this, many of these systems are at end-of-life stage, and require replacing.

## Recommendations

- A PAN-CRI publications, data, reports, data posters database/platform solution for CRIs should be created. This could include non-confidential items that are shareable and accessible by the public, as well as confidential items, the latter having restrictive access within relevant organisations.
- The system would include built-in editing functionality, and approval options, thereby covering the full lifecycle of a publication.
- CRIs should collaborate to have a shared solution, with central Government funding to support a platform solution, and human resources to support the platform technically and for quality control to ensure accuracy and comprehensiveness.
- The database/platform would enable confidential data to be saved with restricted access to client reports and other non-shareable content, such as that covered by IP agreements.
- The database/platform would have APIs (Application Programming Interface) that can filter citation metadata into and out of the system.

Developing and funding a PAN-CRI system embedded in a shared infrastructure that covers the lifecycle of all forms of CRI output and data, and that has appropriate functionality and support personnel, would benefit all CRIs. It would result in a reliable source of information that transcends changes in research foci and organisations; assist with measuring citation impact for researchers; enable CRI science to be more discoverable, and helps manage the authoring and approval processes across the lifecycle. A further advantage of a national approach for research outputs is that it would also support the goals of NZRIS ([New Zealand Research Information System](#)).