

FACTSHEET

Hill Country Futures: AgYields national database

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Measuring yield and growth rates for pastures and crops in New Zealand's agricultural sector provides important information for farmers. However, this data can be expensive to collect and is stored across a range of electronic and physical platforms, making it difficult to access easily.

The AgYields website – www.agyields.co.nz – has been developed to consolidate existing data into a publicly accessible resource.



Key messages

- AgYields aims to be a central repository for all pasture and crop yield data collected in New Zealand.
- It is easily accessed, managed and updated. It is suitable for farmers, rural professionals, students and scientists.
- In time, AgYields will also provide guidelines for standardising future data collection, enhancing New Zealand's livestock and crop production systems.

AgYields for farmers

AgYields allows farmers to see which pastures and crops have been grown in their districts and how much they grew. This knowledge increases the likelihood of more resilient pasture and crop systems being selected.

The database includes both peer-reviewed published data, as well as unpublished data. It references data source, location, soil type, basic management practices and dominant species at the site.

AgYields will become increasingly valuable to the sector over time, because:

- Accessing data about a range of species will help farmers select appropriate species to address climate change challenges and work within environmental regulations.

- Individual farms need local data on different species to inform feed budgeting programmes and make appropriate species selections for different environments.
- It is accessible and easy to use, being a web-based resource (i.e. no additional software is needed).
- Scientists can link yield and flowering data with meteorological information. This will generate information for pasture growth forecasting and predicting the impacts of drought on growth and development to inform regional decision making.

AgYields potential in the future

For AgYields to fulfil its potential for the sector, it will need to acquire historic, current and future datasets. This includes those from publicly-funded (MPI and MBIE) research programmes at Lincoln and Massey Universities and the CRIs, as well as industry-supported research, such as the B+LNZ Hill Country Futures Research Programme. The database will grow to include results from commercial seed and fertiliser companies, which regularly conduct on-farm species and cultivar evaluations.

AgYields' effectiveness will therefore be determined by the willingness of industry organisations to share data for the benefit of the sector.

The overall value of the database will be further enhanced by standardising data collection methods and reporting. Online videos of how to use the database and collect the data are also being developed as part of the Hill Country Futures programme.

Conclusion

AgYields is a central repository of pasture and crop data to enhance current and future research and agribusiness requirements.

It will reduce duplication of effort in collecting valuable pasture and crop datasets.

The cooperation of researchers, funders and users is required to maximise its value and initiate the first step in driving the next century of crop and pasture research and innovation.

Further reading

Moot D.J., Griffiths, W.M., Chapman D.F., Dodd M.B., Teixeira, C.S.P., 2021. AgYields - a national database for collation of past, present and future, pasture and crop yield data. *Journal of New Zealand Grasslands* 83: 15-24. Online at: www.nzgajournal.org.nz

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