

## REVIEW Agridat

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R (R Core Team 2013) is an open-source statistics software environment that can be downloaded from the R project website at <http://www.r-project.org/> to provide a free resource for modern statistics computing. The basic R download includes a range of core tools but the real strength of R is in the contributed packages that extend and generalize the core language. A recent contributed package that should be of interest to agricultural statisticians and research workers is the 'agridat' package (Wright 2013), which provides access to real datasets from a large number of published agricultural research papers. Currently, the package contains more than 140 datasets covering field and horticultural data, uniformity data, animal data, tree data, time series data and a few sets of disease, soil and economics data. The data sets include, for example, the classical Mercer & Hall uniformity trial on wheat (Mercer & Hall 1911) and the classical Yates (1935) split-plot experiment on oats as well as many other data sets both old and new.

The 'agridat' datasets are formatted as data frames and each dataset has example code which can be input directly into R to provide an example analysis of the formatted dataset. For example, the Mercer & Hall dataset has code that provides graphical displays of the uniformity data, whereas the Yates (1935) oats dataset has code that provides a mixed model analysis of the

split-plot oats data. Other datasets include a wide range of statistical methods and provide a wealth of interesting examples.

Access to real research data is important for the development and testing of new statistical methods and the 'agridat' datasets should be a boon to methodological research in agriculture. Installation of the 'agridat' package is fairly straightforward but does require some basic knowledge and experience of the R environment. As R is now such a widely used and well-established statistics language, time spent learning about packages such as 'agridat' should be time well spent.

### REFERENCES

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