

Statements of Results as Titles



Busy scientists have time to read only the titles of many technical articles. If titles are informative, even such very brief exposure can convey information to the reader. A title can be especially informative when it is written as a statement of the main result or conclusion of the reported research. Following are examples of such titles from recent issues of several journals.

- Soybean competition helps herbicides control Johnsongrass. WEED TECHNOLOGY, 1988.
- Exogenous polyamines stimulate ethylene synthesis by soybean leaf tissue. ANNALS OF BOTANY, 1990.
- Oxidiazon activity is similar to that of *p*-nitro-diphenyl ether herbicides. WEED SCIENCE, 1989.
- Rainfall removes epicuticular waxes from *Isocoma* leaves. BOTANICAL GAZETTE, 1987.
- Photoporphyrin IX content correlates with activity of photobleaching herbicides. PLANT PHYSIOLOGY, 1989.
- Annual species of *Medicago* greatly differ in their ability to nodulate on acid soil. AUSTRALIAN JOURNAL OF AG. RESEARCH, 1989.
- Glutamate induces calcium waves in cultured astrocytes. SCIENCE, 1990.
- Plant growth regulators suppress established orchard sod and dandelion population. WEED TECHNOLOGY, 1989.

Had the second title been "Effect of exogenous polyamines on ethylene synthesis by soybean leaf tissue," the reader would not know without reading the paper (or at least the abstract) whether the effect was to stimulate, to depress, or something else. Had the fourth title been "Response of epicuticular waxes of *Isocoma* leaves to rainfall," the reader would not know from the title what rainfall had done to the wax. In contrast, when the title is a statement, the reader can learn the paper's principal contribution to knowledge by reading the title only. Furthermore, each title written as a statement was shorter by two words than a conventional title would have been.

Only papers that address a specific question and that present a non-complex answer lend themselves to statement titles. The following titles of articles in WEED SCIENCE were very good as written, and could not have been written effectively as statements.

- Anatomy and sprouting of yellow nutsedge tubers.
- Absorption and degradation of chlorbromuron in soil.
- Field comparison of twelve dinitroaniline herbicides.
- Systems of weed control in peanuts.
- Weed seed germination under simulated drought.

In contrast, the following titles from WEED SCIENCE could have been written as statements.

- As published: Effects of diallate on foliar uptake and translocation of herbicides in peas;
Could have been: Diallate increases foliar uptake and translocation of herbicides in peas;
- As published: Selective control of kochia in sugarbeets with phenmediphan;
Could have been: Phenmediphan controls kochia selectively in sugarbeets.
- As published: Seasonal variation in flowering of common dandelion;
Could have been: Common dandelion flowering varies with season;
- As published: Effect of carbaryl and PCMC on dodder control with chlorpropham;
Could have been: Carbaryl and PCMC improve dodder control with chlorpropham.

In each of these papers, the research addressed a specific subject, and the results were direct enough that the titles could have been written as statements. In each case, the alternate title presents more information than the original title, and does so with fewer words. Titles beginning with "Effect of" or "Response of" can often be converted to statements if the effect or response is straightforward and not complex or conditional.

The following titles from WEED SCIENCE also could have been written as statements:

- As published: Interaction of alachlor with carbofuran.
● Could have been: Alachlor interacts with carbofuran.
- As published: Reducing herbicide injury to sorghum with crop protectants.
● Could have been: Crop protectants reduce herbicide injury to sorghum.
- As published: Enhancement of herbicides by silicone surfactants.
● Could have been: Silicone surfactants enhance herbicides.
- As published: Differential butylate injury to corn hybrids.
● Could have been: Butylate injures corn hybrids differentially.

These titles have all the elements of statements, but the action word is a noun or participle rather than a verb in the present tense. Such titles are readily changed to statements when the action words are converted to verbs. The statement titles do not present more information than the original, but are shorter by one or two words.

Remember:

- If a statement of results
Can be your paper's title,
Words employed can be reduced;
The message made more vital.

J. H. Dawson, U.S. Dep. Agric., ARS, Prosser, WA 99350