Better Crops with Plant Food (BC) magazine is published quarterly (four times each year) by the International Plant Nutrition Institute (IPNI). This publication is unique in many ways, and thus has its own set of style guidelines. Prospective authors of articles for BC are encouraged to follow these suggestions. If there are questions, please contact the Editor at IPNI, or an appropriate IPNI staff member. See the website at: http://bettercrops.org

BACKGROUND

Better Crops with Plant Food is not a peer-reviewed academic journal, nor is it intended as a popularized consumer magazine for the general public. The BC audience includes a diverse cross section of readers involved in agronomic research, education, marketing, production, and related fields. Many BC readers work as crop advisers, in soil and water conservation activities, in university and extension responsibilities, and as industry and dealer representatives. The readership also includes students, educators, and farmers.

The purpose of BC articles is to present information originating from agronomic research in a condensed, interpretive style. Readers with a range of educational backgrounds should be able to quickly comprehend the highlights and understand the significance of the subject matter.

An ideal BC Issue is full of learning opportunities from a mix of (1) interpretive research stories from the field, (2) general review articles explaining agronomic concepts, and (3) illustrative examples built around published research, or even a single figure, table, or photo. BC does not accept advertising, and thus does not offer a rate card or editorial calendar. BC does not encourage or accept articles offered by public relations agencies or freelance authors.

In general, articles should be submitted at least 3 to 4 months ahead of expected publication date. Articles should not be submitted directly to the editorial offices at IPNI headquarters. Instead, manuscripts should originate through communication between IPNI Program Directors and a potential author. After the appropriate IPNI Staff have approved a proposed article topic, both will also review the content before passing the article and related material on to the Editor.

Authors will be given opportunity to verify any edits or other changes to articles during the formatting process. Complete contact information should be provided by the author, including e-mail address.

GUIDELINES

Following are some key points related to BC style.

Abbreviations: Preferred abbreviations for BC articles are listed on a separate document (see Preferred Spellings, Abbreviations, and Their Usage).

Units: This may be considered an unusual style policy, but BC publishes some articles in metric units and some in units commonly used in the USA. In an effort to be "reader friendly", the units used in an individual article should be those common to the region associated with the topic. For example, an article on rice yields in Southeast Asia would use metric units such as kg/ha, while an article on corn yields in Iowa would use units such as bu/A. This publication does not use SI units in articles.

Article Length: In general, about 1,200 words should be adequate for most topics as BC articles, plus accompanying tables, figures, photographs, or other illustrations.

Title: The title should be descriptive, but brief. While sensationalized titles are not appropriate for BC, we suggest that authors try to avoid a title that reads like a dull, dusty label.

Author Information: A byline showing the name(s) of the author(s) should appear immediately after the title. Given names should be spelled out. Further information about the author(s) should be listed at the end of the article. This should include the title, affiliation, and location of each author. The e-mail address of the corresponding author(s) should be indicated. In some circumstances, the e-mail address of each author may be included.

Synopsis: Each article submitted to BC will include a brief highlight sentence or two that introduces the key purpose of the article.
Take It To The Field Message: Articles extracted from field research should include a brief "Take Home" message that can directly state one or two nutrient management lessons that a farmer or crop adviser can use.

Paragraphs: A series of short, descriptive paragraphs should lead the reader through an explanation of the work, general discussion of experiments and procedures, and implications of results. Note practical applications and possible future developments. Subheadings can be helpful.

Summarize: Wrap up the article in a practical statement. Give the reader a conclusion to remember and use.

Statistics, Numbers, and Rounding: BC does not require extensive presentation of statistics with articles. However, any data presented in tables and figures should be supported with appropriate statistics. Whenever statistics are used, the level of significance should be indicated as p = 0.05, p = 0.01, etc. Limit significant figures in text, tables, and illustrations depending on the units reported and the accuracy of the measuring method or instrument. For example, it is appropriate to report soil organic matter as 3% or 3.2%, but not 3.21%. Indicate soil pH as 6.5, not 6.52 or 6.523. Percentage yield increase could be 115%, but not 115.4%. In metrics, grain yield should be 3.145 kg/ha, not 3,145.3 kg/ha, or 3.14 t/ha, not 3.145 t/ha. Soil test results should be rounded to 15 mg/kg or 15 ppm, not 15.3. For example, fertilizer application rates should be 150 kg K2O/ha, not 150.5.

Keep in mind that the numerical value of every measurement is only an approximation, and no physical measurement of mass, volume, or other parameter is ever absolutely correct. Reported data should not include more digits than those measured. For example, reporting a mean of 12.345 kg from observations made with a scale that weighs to the nearest hundredth of a kilogram would create false precision. A value can be rounded off to the appropriate number of significant figures by dropping digits to the right. When the first digit dropped is < 5, the last digit retained should remain unchanged. When the first digit dropped is ≥ 5, the last digit retained should increase by 1 if it is odd or remain unchanged if it is even.

For example, if the above mean of 12.345 kg must be rounded to hundreds of a kilogram, drop the last digit to the right. The first digit dropped will be 3 and — because it is less than 5 — the last digit retained will remain unchanged. Therefore, the rounded-off mean is 12.3 kg.

Numerals: It is a fairly universal style or convention to use numerals where practical to indicate values of units of measure, such as 100 bu or 500 ha. Better Crops with Plant Food style preference is to extend this rule and use numerals instead of spelling out numbers in broader usage. For example, say 8 bu/A instead of eight bu/A; 9 kg/ha instead of nine kg/ha. This more abbreviated style should be applied to situations such as time (hours, days, months, years, etc). For example, say 4 site-years instead of four site-years; 7 hours instead of seven hours.

Table 3. Soil properties at baseline sampling before treatment implementation in June 2013, and as affected by good agricultural practices without fertilizer nutrients (GAP), and GAP including fertilizer nutrients (GAPN) determined in 2014 and 2015.

<table>
<thead>
<tr>
<th></th>
<th>pH</th>
<th>DM</th>
<th>Total N</th>
<th>Brany P</th>
<th>Exch. K</th>
<th>Exch. Mg</th>
<th>Exch. Ca</th>
<th>Ca/Mg ratio</th>
<th>(Ca+Mg)/g ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base 06/2013</td>
<td>5.4</td>
<td>4.4</td>
<td>0.19</td>
<td>40.5</td>
<td>0.68</td>
<td>5.5</td>
<td>26.6</td>
<td>6.8</td>
<td>50.6</td>
</tr>
<tr>
<td>GAP 06/2014</td>
<td>7.0</td>
<td>4.0</td>
<td>0.18</td>
<td>43.6 a</td>
<td>0.54</td>
<td>4.3</td>
<td>20.3</td>
<td>5.7</td>
<td>52.5</td>
</tr>
<tr>
<td>GAPN 06/2014</td>
<td>7.0</td>
<td>3.9</td>
<td>0.19</td>
<td>28.6 b</td>
<td>0.56</td>
<td>4.8</td>
<td>18.9</td>
<td>4.8</td>
<td>50.3</td>
</tr>
<tr>
<td>GAP 12/2015</td>
<td>6.9</td>
<td>4.4</td>
<td>0.18 b</td>
<td>59.0</td>
<td>0.90</td>
<td>3.1 a</td>
<td>15.8</td>
<td>5.2</td>
<td>27.8</td>
</tr>
<tr>
<td>GAPN 12/2015</td>
<td>6.8</td>
<td>4.3</td>
<td>0.30 a</td>
<td>78.6</td>
<td>0.69</td>
<td>2.9 b</td>
<td>16.1</td>
<td>5.6</td>
<td>28.4</td>
</tr>
</tbody>
</table>

Notes: June 2013/2014, 22 farms; December 2015, 12 farms; others had applied fertilizer in GAP Differences within year between GAP and GAPN were tested for statistical significance. Values without letters are not significantly different from one another within the same year at p < 0.05.

Subscripts: Authors should include proper subscripts and superscripts where appropriate for expressions such as P2O5 and K2O. Where the ionic form of an element is used, it should appear with the correct charge indicated, such as NO3 -, NH4 +, SO4 2-, Cl- or Ca2+.

Currencies: When necessary to indicate that a monetary value is presented in a specific currency, use the full abbreviation of a currency on its first appearance (e.g. A$52, C$52, US$52); subsequent occurrences can use just the symbol of the currency (e.g. $88), unless this would be unclear. When there are different currencies using the same symbol in an article, use the full abbreviation (e.g. US$ for the US dollar and A$ for the Australian dollar, rather than just $).

Do not place a currency symbol after the value (e.g. 123$, 123€). Currency abbreviations that come before the number are unspaced if they consist of or end in a symbol (£123, €123), and spaced if alphabetic (£ 75).
Format ranges with one, rather than two, currency signifiers (e.g. $250 to $300, not $250 to $300). A US$ conversion rate for all other currencies will need to be included in the article’s list of abbreviations and notes.

If there is no common English abbreviation or symbol, use the ISO 4217 standard (details found at http://en.wikipedia.org/wiki/ISO_4217).

References: While references are allowed with articles for BC, we discourage excessive lists. Also, BC uses an abbreviated style in reference lists, a form of the author-year notation system. For example, in citing a reference from a periodical at the end of the text of a BC article, the title of the article should not be included. If the citation has more than three authors, only the first author is provided followed by the et al. notation. Here are some examples of typical citations:


BC style also limits the number of authors to be named in a reference within the text of an article. Where more than two authors are associated with a reference, BC style is as follows: Name the first author, then use “et al.” to indicate that there are additional authors not listed. However, all authors should be named in the reference list at the end of the article (special circumstances may require an exception to be determined by the Editor). Here are some additional guidelines related to references.

1. All publications cited in the text should be presented in a list of references following the text of the manuscript. The manuscript should be carefully checked by the author(s) to ensure that the spelling of names and indication of dates are exactly the same in the text as in the reference list.

2. In the text, refer to the author’s name (without initial) and year of publication. Examples: “Since Johnson (1988) has shown that…” “This is in agreement with results obtained later (Welch, 1989).”

3. References cited together in the text should be arranged chronologically. The list of references should be arranged alphabetically by author’s names, and chronologically per author. References should not be numbered.

4. Acknowledgments are generally not encouraged with BC articles, but are considered on a case-by-case basis.

EXAMPLE OF BETTER CROPS WITH PLANT FOOD STYLE ELEMENTS GUIDELINES

(see next page for examples)

Region: Indicate the geographic area, such as North America, Brazil, China, etc.

Headline: The title should be concise and descriptive.

Name of author(s): Given names should be spelled out.

Synopsis paragraph: An opening summary statement is required at the beginning of each article.

Photos: Images should be provided as high resolution digital (tif or jpg preferred) files. Provide images as separate file. Images embedded with article text are considered examples only.

Text: State the key information. Avoid complex sentences. Use subheads when appropriate.

If using figures (graphs, charts): Provide figures as separate files in their original forms (Excel, PowerPoint, etc.). You can embed them with the article text as an example of their use only. Include the data used to create graphs when possible and practical.

For major nutrients and frequently used expressions: List abbreviations in a box to reduce the need for parenthetical notes in the article.

Tables: Generally, two or three tables should be sufficient. More may be allowed, but avoid large, complex tables. Tables should be regular text or created with the Word table function. Tables should appear at the end of the file. See further comments about tables with page illustration on the next page.

GUIDELINES FOR TABLES OF DATA IN BC ARTICLES

- Heading should be concise and descriptive.
- Use standard abbreviations in column headings and for units.
- Generally, align data at the decimal point.
- While statistical significance information is not required, it can be included if deemed appropriate.
- Level of significance should be indicated, e.g., $p = 0.05$. 

Style Guide for Communications | February 2018 5
Cocoa global production has surged strongly over the past 20 years to nearly 4.6 million Mt, mostly from West Africa (FAO, 2015, 2016). Between 2009 and 2013, consumer demand for cocoa will increase by 1 Mt (ICCO, 2013), mainly driven by the growing consumption in the Asia-Pacific region, particularly China and India (Spiranovic and Swinnen, 2016). Growth in West African production has stagnated over the last 10 years at a rate of about 2.7 Mt, and continued growth in demand has encouraged new producers into the market. Indonesia is now the world's third largest producer, with a planned area between 0.8 to 1.1 M ha, seemingly well placed to benefit from global market developments.

Until recently, growth of production has been almost entirely through expansion of area. With the exception of Central America, which has shown a steady improvement over the past 20 years, yield in many areas has plateaued at an average close to 9.3 t/ha (Rahel et al., 2011; Amri and Koko, 2009), well below the theoretical potential of 11 t/ha (Cunliffe, 1983). Indonesia is no exception, and since 2010 yield has dipped below 6.5 t/ha, undermining cocoa farm profitability and preventing substantive yield to the survival of the industry in Indonesia. At the same time, global markets are strong. The opportunity for Indonesia is to benefit from growth in global demand by pushing yield consistently beyond 11 t/ha. With adequate management in place, cocoa dry bean yields between 1 and 3 t/ha can be achieved in commercial fields (Anekallu, 1992; Butler, 2004; Mahurir, 2005; Pang, 2006, Koko et al., 2013). The role

Researchers combined a suite of good agricultural practices with 4R-consistent nutrition to achieve a rapid improvement in cocoa bean yield and quality under the guidance of local Cocoa Carers and Monitors. Close monitoring of the soil nutrient balances will be required to sustain the early gains.

**INFORMATION**

**Cocoa Yield under Good Agricultural Practices and 4R Nutrient Management in Indonesian Smallholder Systems**

By Thomas Oberste, Mariane Samson, Noel Jamenis, and Kate Jamennis

**HEADLINE**

Benefits of Implementing 4R Nutrient Management in Smallholder Cocoa Systems

**AUTHOR(S)**

**PHOTOS**

**REGION**

**SYNOPSIS**

**KEYWORDS**

sustainable intensification; cocoa fertilizers; dry bean yield; bean size; good agricultural practices

**ABBREVIATIONS AND NOTES**

If the article is related to an IPNI project, add the project number at the end.
Guidelines for Tables of Data in BC Articles

- **Heading** should be concise and descriptive.
- Use standard abbreviations in column headings and for units.
- Generally, align data at the decimal point.
- While statistical significance information is not required, it can be included if deemed appropriate.
- **Level of significance should be indicated, such as p = 0.05.**

### REFERENCES

If three or more names are included in a reference, we will condense it to show the first author name only, year of publication, and source. The title of the article will not be included.