

Illinois Department of Agriculture
SUBSTANTIATION FORMAT FOR SOIL AMENDMENTS
(All information must appear in this order)

A. Title Page with the Soil Amendment common/trade or marketing name and Producer, including:

- (1) Effects on the soil and/or the crop response being measured.
- (2) Dates and locations of trials.
- (3) Relationship between investigating organization and producer.
- (4) List of investigators including qualifications.

B. Introduction describing the nature of the soil amendment product, which includes:

- (1) A discussion of recommended uses including a discussion of prohibitions or cautionary warnings.
- (2) A clear identification of each claim to be made for the soil amendment, soil amending ingredient, and other product ingredient if appropriate.

C. Materials, Methods and/or Experimental Procedures, including:

- (1) Characterization of the experiment sites/research locations by soil classification, soil texture, soil reaction (pH), soil organic matter, soil nutrient content (P & K) referencing the procedures used to determine each characterization parameter; crop, treatments and relevant tillage practices in the year prior to the beginning of the research activity.
- (2) Details of the soil amendment research procedures and materials employed during this study, *i.e.* Date of planting and harvest planting/seeding rate, variety and/or hybrid, pest infestations and control techniques, fertilizer amounts, type and application timing, tillage methods/practices. The growing season profile of climatic and weather conditions for the year preceding as well as each year the study was conducted, reporting such things as amount and distribution of precipitation, average daily temperature planting thru harvest and maximum soil temperature daily planting thru harvest.
- (3) Report of relevant data and procedures with respect to environmental impact assessments relating to such factors as persistence, leach-ability and run-off potential, as well as degradation compounds and rate.
- (4) Discuss the layout and experimental design in detail sufficient for reviewer to ascertain that treatment border effects were eliminated and plots were of sufficient size and repetition to assure unbiased samples. A minimum six treatment as follows is suggested for field evaluation:
 - (a) A control or untreated area without the application of either the soil amendment or soil lab recommended or customary grower fertilizers.
 - (b) Application of the soil amendment under test at the rate and method specified on the label.
 - (c) Application of the soil amendment under test at the rate and method specified on the label plus fertilizer application based on soil laboratory recommendation or customary grower practices.
 - (d) Application of the soil amendment under test at the rate and method specified on the label plus the soil amendment producer's recommended agronomic practices.
 - (e) The soil amendment producer's agronomic practices without the soil amendment (same agronomic practices as (d) above).
 - (f) The soil laboratory recommended or customary grower fertilizer application with no soil amendment.

D. Results and Discussions must summarize and analyze data to support each of the claims to be made for the soil amendment as registered.

- (1) Data should be standard English measurement units to the extent possible with appropriate statistical analysis at a significance level of 10% or less. Yield data should be corrected to a standard moisture and discussion should be in lay terms to the extent practicable.
- (2) Raw data must report measured area and actual pounds harvested and moisture content and where yield is a function of stand at harvest then a plant count per plot at harvest need to be included.

E. Conclusion should summarize the proof of effectiveness claims to be made for the soil amendment, or any soil amending ingredient or other ingredient in the product as it is to be registered.