

BMP CHALLENGE®

Take the CHALLENGE. How much can you save?

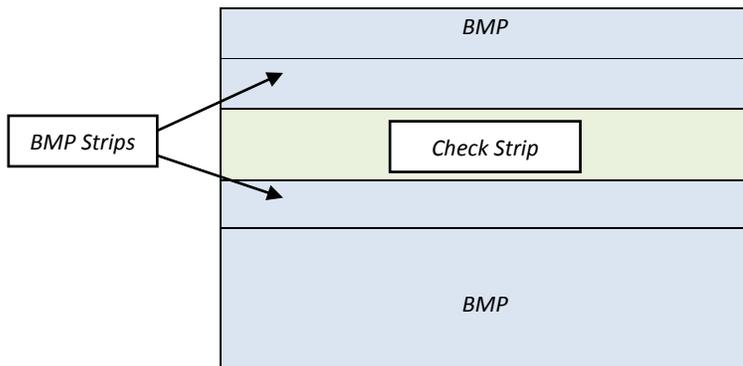
USING A SIDE-BY-SIDE APPROACH, FIND OUT FIRSTHAND HOW NUTRIENT AND REDUCED TILLAGE BEST MANAGEMENT PRACTICES (BMPs) CAN BOOST YOUR BOTTOM LINE.

For the 2012 growing season, the BMP CHALLENGE® is available to corn farmers in California, Minnesota, Iowa, Illinois, Indiana, Michigan, Wisconsin, Nebraska, Ohio, Missouri, Delaware, Pennsylvania, Virginia, Maryland, New York, South Dakota, Vermont, Idaho and North Carolina. This program provides a framework to evaluate nutrient management or reduced tillage practices on farmers' own fields.

A qualified crop advisor assists with check strip layout and validates cropping information and yields. Results are reported to participating farmers including an economic analysis based on their actual nutrient use and costs and yields. Participant identities and results are kept confidential. Only anonymous data summaries will be shared.

For more information, contact Rebecca Ressler at (608) 232-1425 or rebecca.ressl@bmpchallenge.org.

Eligibility	The BMP CHALLENGE is available for corn grown for grain, silage or sweet corn using manure and/or commercial fertilizer. Limit: Up to 100 acres per field.
Mechanics	Single check strip receives traditional fertilizer or tillage practice. The balance of the field receives university-recommended fertilizer rates for N, P and/or K, or tillage practices that maintain at least 30% residue. Eligible practices include pre-sidedress N Test (PSNT), Corn Stalk N Test, minimum disturbance incorporation of manure or commercial fertilizer, manure injection, N inhibitor, and sensor-based variable rate application.
Producer Compensation	The BMP CHALLENGE completes a net income analysis: if the BMP yield is less than the check strip yield, minus the savings in fertilizer or tillage costs, you receive a payment to account for the difference. You will earn at least as much as if you used your typical fertilizer or tillage practices.



In each field, a qualified crop advisor carefully places a single set of comparison strips following a written protocol to reduce variability. The Check Strip receives the farmer's traditional practice and the rest of the field receives the new BMP. To minimize impacts of within-field variability, yield comparisons at harvest use the immediately adjacent BMP Strips only.

Eligible Practices: The BMP CHALLENGE can be used with numerous practices based on the priorities of the farmer, his/her advisers and state and federal agencies. The best practices are ones that, a) producers would like to try but haven't gotten "off the fence," and b) a fear of foregone income is a key barrier to adoption. Below are a number of practice options that are eligible for 2012.

1. **Reduced Tillage:** Includes any variation that retains at least 30 percent residue, including no-till, strip-till or ridge-till
2. **Nutrient Management Basic:** Plan implementation (manage the amount, source, placement, form and timing of the application of plant nutrients and soil amendments); includes full crediting of available manure N
3. **Pre Side-dress Nitrate Testing (PSNT):** Base final N application on an in-season soil test; second application is greater than the first
4. **Corn Stalk Nitrate Test (CSNT):** Base N application on a post-season stalk test
5. **Minimum Disturbance Incorporation:** Manure or commercial fertilizer (e.g., Turbo Till, Aerway); lower N rate on BMP Portion
6. **Manure Injection:** (e.g., sub surfer, knife injector); lower N rate on BMP portion
7. **Nitrogen Inhibitor/Enhanced N Products:** Slow release commercial with manure or no manure
8. **Sensor-based Variable Rate Application:** (e.g., Crop Circle, Green Seeker)
9. **Phosphorus Reduction:** To BMP level; testing needed for "pop-up" P application on corn
10. **Others?** Additional input is welcome.

Nutrient BMP CHALLENGE Examples, Corn Grown for Grain*

*Examples using typical 2011 corn and fertilizer prices

Situation 1: Yield Gain with BMP	Conventional	BMP
Total Nutrients	264 #N/acre	214 #N/acre
Fertilizer Cost	\$90/acre	\$60/acre
Planning Cost	\$0	\$0
Savings	\$30/acre and 50 #N/acre	
Yield	188.5 bu/acre	190.54 bu/acre
Value (\$6.01/bu)	\$1132.89/acre	\$1145.12/acre
Yield Gain or Loss	\$12.23/acre	
Yield Gain + Fertilizer Savings	\$12.23/acre + \$30/acre = \$42.23/acre	
Guarantee Payment	\$0	
Farmer Contribution	\$6.00/acre (the lesser of \$6/acre or 1/3 of \$42.23/acre)	
Farmer Net Return	\$42.23/acre - \$6/acre = \$36.33/acre	

Situation 2: Yield Loss with BMP	Conventional	BMP
Total Nutrients	187 #N/acre	138 #N/acre
Fertilizer Cost	\$155.05/acre	\$130.79/acre
Planning Cost	\$0	\$0
Savings	\$24.26/acre and 49 #N/acre	
Yield	151.49 bu/acre	145.49 bu/acre
Value (\$6.01/bu)	\$910.45/acre	\$874.39/acre
Yield Gain or Loss	-\$36.06/acre	
Yield Loss + Fertilizer Savings	-\$36.06/acre + \$24.26/acre = -\$11.81/acre	
Guarantee Payment	\$354.3 (30 acres)	
Farmer Contribution	\$0	