ROI Calculator 2.0

The industry's first nutrient return on investment calculator to incorporate spatial variation shows how much you could increase your yield and net return with optimal P and K applications.

TUTORIAL NUTRIENT ROI CALCULATOR 2.0 CHANGE VALUES EMAIL RESULTS Increase your net return by an average of 22,400

X

If you add

133 lb/acre

of entered fertilizer material, which supplies 80 lb/acre of K₂O, you could increase your yield by

22 bu/acre.

Your crop will be removing

53 lbs/acre

of potassium from your soil that has a value of

\$15/acre.

Learning How To Use This Tool

eKonomics



1) Crop selector: To get started, choose your crop.

3) State/Region selector:

Then choose your state or province. If it is not listed, select the geographic location or regional "hybrid" nearest you.

5) Acreage:

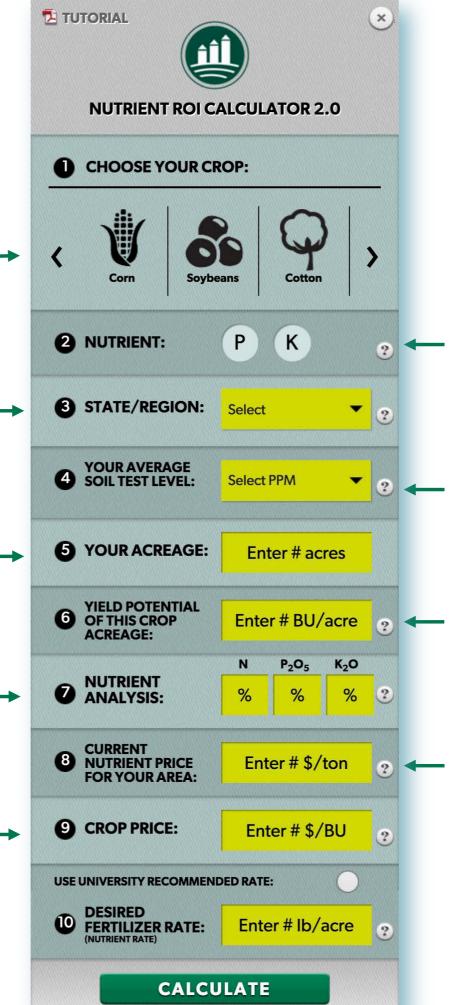
Enter the acreage of your farm.

7) Nutrient Analysis:

Enter the specifications for your nutrient. This can be a single _____ or multi-nutrient fertilizer. The calculator will determine the ROI of the P or K in your nutrient.

9) Crop price:

For crop prices, please consult our commodity futures prices ticker.



2) Nutrient selector:

To see how much more net return you could earn by an investment in phosphorus, pick P. For potassium, pick K.

4) Soil test level selector:

Choose your soil test level. Refer to your most recent soil test to determine P or K levels. If you don't have that info, contact your local retailer agronomist, consultant, or extension agent.

6) Yield potential:

To get this number, take the highest yield you've ever had and add 10%.

8) Current nutrient price:

Enter the current nutrient price for your area. If you don't know it, consult your local retailer agronomist.

(Continued)

(Continued)

10) Desired fertilizer rate: You can use the university – recommended rate (This rate is a default fertilizer rate for each state as recommended by a leading agronomy university within that state) or you can enter a rate of your own.

When relevant, the field for cost of MOP or DAP will appear. You can select the current mid cornbelt terminal price as a default value or you can enter a rate of your own.

DESIRED FERTILIZER RATE: (NUTRIENT RATE)	lb/acre of P ₂ O ₅	?
JSE CURRENT MID CORNBELT		
COST OF AMMONIA:	Enter # \$/ton	?
USE CURRENT MID CORNBELT		
COST OF MOP:	Enter # \$/ton	?
CALCU	LATE	

11) Cost of Ammonia:

When relevant, the field for the cost of ammonia will appear.
You can select the current mid cornbelt terminal price as a default value or you can enter a rate of your own.

Learning How To Use This Tool

General rules of thumbs:

- For every 20 pounds of P added above crop removal soil test level will increase by 1 ppm.
- Similarly, for every 20 pounds of P removed without fertilization, soil test level will decrease by 1 ppm.
- For every 6 pounds of K added above crop removal soil test level will increase by 1 ppm.
- Similarly, for every 6 pounds of K removed without fertilization soil test level will decrease by 1 ppm.



eKonomics





We are providing two different scenarios to demonstrate how you can use the calculator.

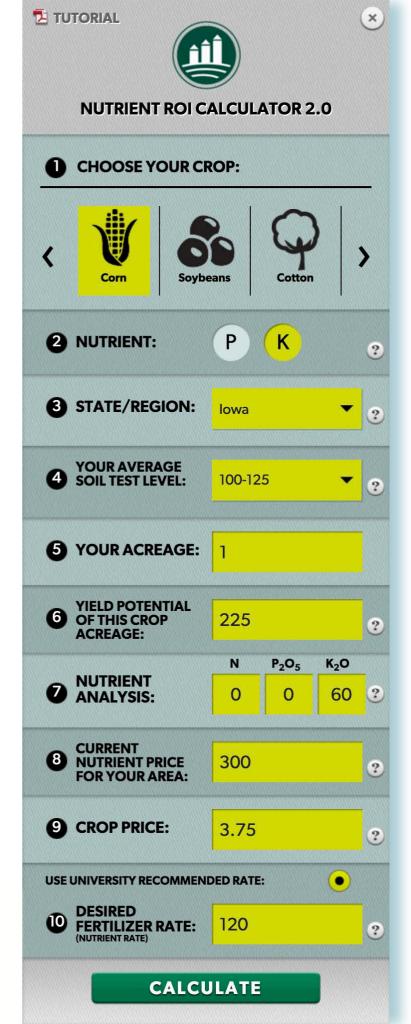
- The first scenario will be a demonstration of how to use this tool to determine the profitability of fertilizing a corn/soybean rotation.
- The second scenario will be a demonstration of how to use this tool to determine the profitability of building up a soil test.



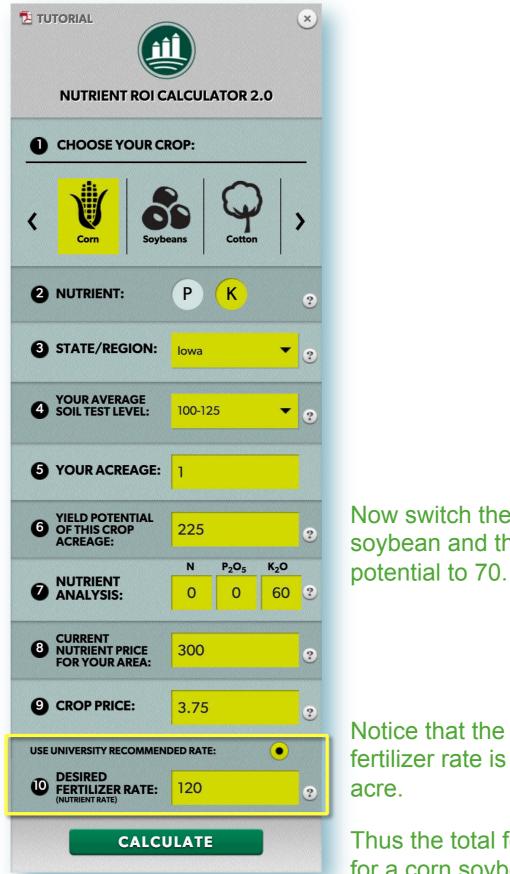
eKonomics

Scenario 1 – Fertilizing a rotation

We are providing specific values as a demonstration, but realize this approach can be used for many scenarios:



Scenario 1 – Fertilizing a rotation

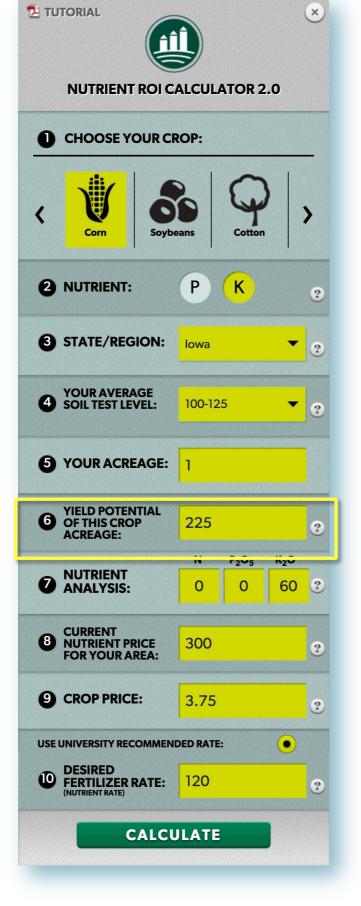


X **TUTORIAL** NUTRIENT ROI CALCULATOR 2.0 CHOOSE YOUR CROP: > Corn Soybeans Cottor **2** NUTRIENT: Ρ K ? **3** STATE/REGION: lowa ¥ ? 4 YOUR AVERAGE SOIL TEST LEVEL: 100-125 ¥ ? 5 YOUR ACREAGE: Now switch the crop to 6 YIELD POTENTIAL OF THIS CROP ACREAGE: 70 ? soybean and the yield N P205 K₂O O ANALYSIS: 0 0 60 ? 8 CURRENT NUTRIENT PRICE FOR YOUR AREA: 300 ? **9** CROP PRICE: 10.00 ? Notice that the default **USE UNIVERSITY RECOMMENDED RATE:** • fertilizer rate is 110 lbs/ DESIRED FERTILIZER RATE: (NUTRIENT RATE) 110 ? Thus the total fertilizer rate CALCULATE for a corn soybean rotation is 230 lbs of K₂O/acre.

Notice that the default fertilizer rate (based upon university recommendation) is 120 lbs/acre.

Scenario 1 – Fertilizing a rotation

Let's just assume that we will use the university recommendations for each of the crops in the rotation (switch the crop back to corn and the yield potential to 225).



Click "Calculate".

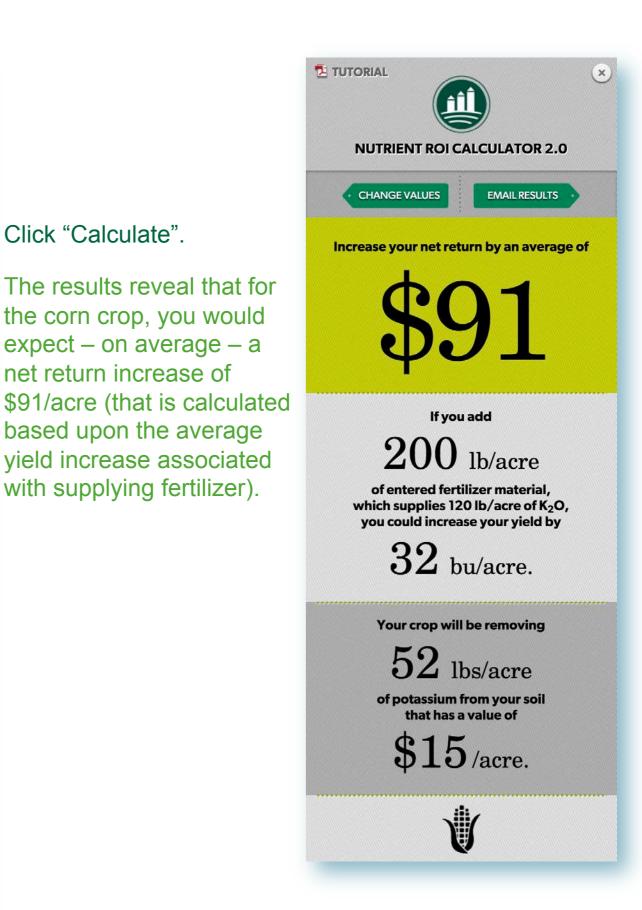
the corn crop, you would

expect - on average - a

based upon the average

with supplying fertilizer).

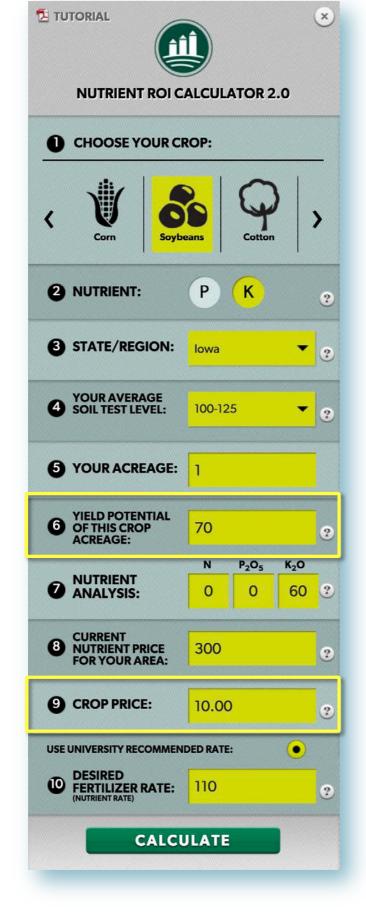
net return increase of

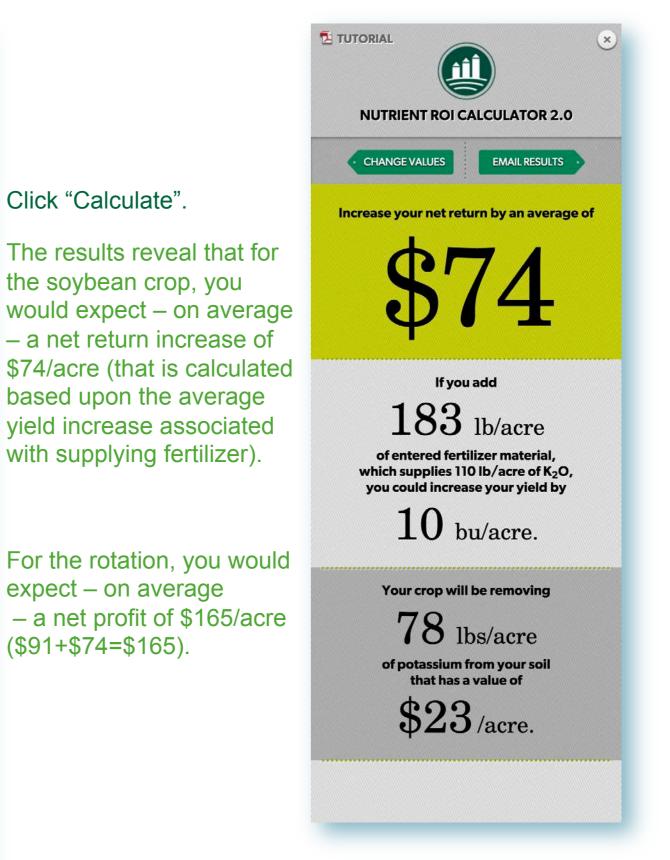


Scenario 1 – Fertilizing a rotation

Click "Change Values" from the results page.

Change the crop to soybean, the yield potential to 70, and the crop price to \$10.00.

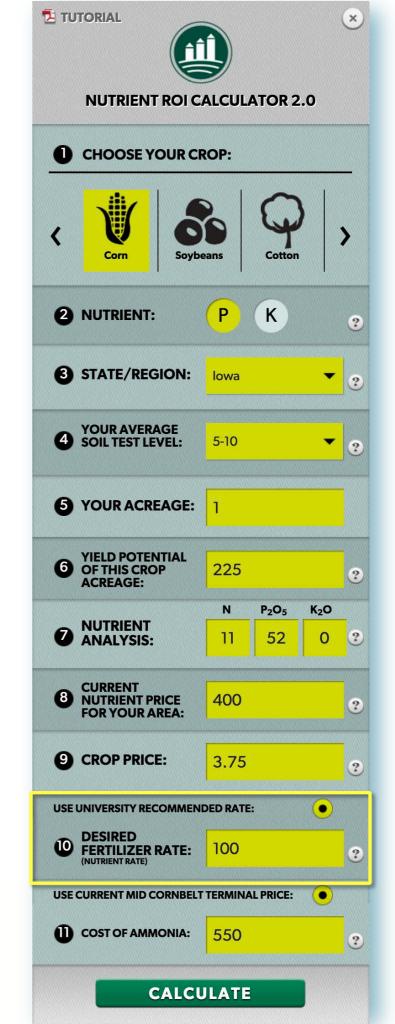




Scenario 2 – Building up a soil test

We are providing specific values as a demonstration, but realize this approach can be used for a variety of scenarios:

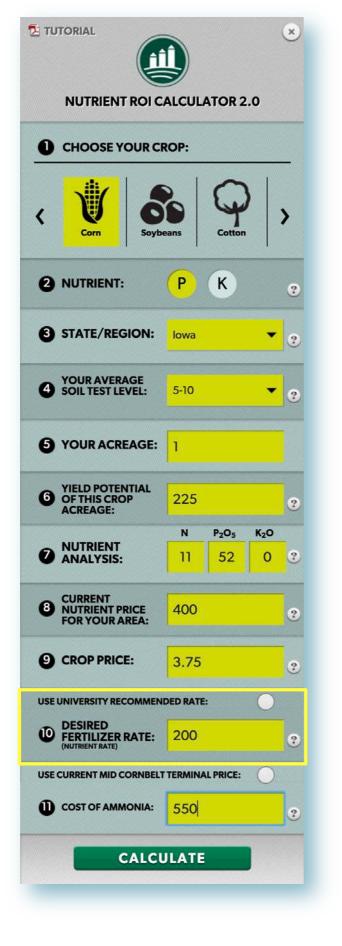
Notice that the university recommendation is 100 lbs of P_2O_5 /acre.



Scenario 2 – Building up a soil test

Now assume that we desire to increase the soil test level (assuming an initial level of 9 ppm), so we apply an additional 100 lbs of P_2O_5 /acre – change the rate to 200.

This will theoretically increase soil test level by 6 ppm.



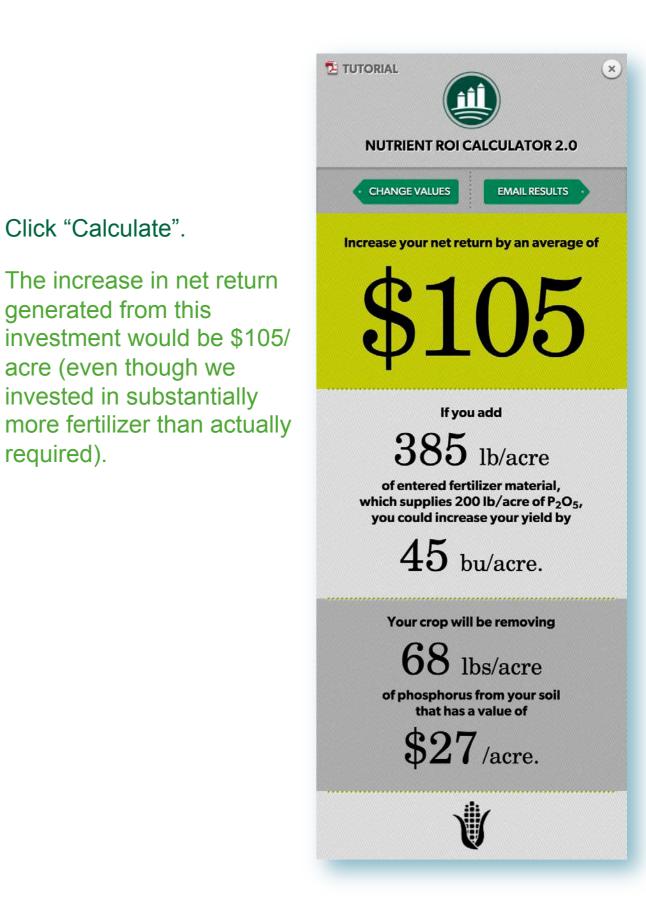
Click "Calculate".

generated from this

required).

acre (even though we

invested in substantially

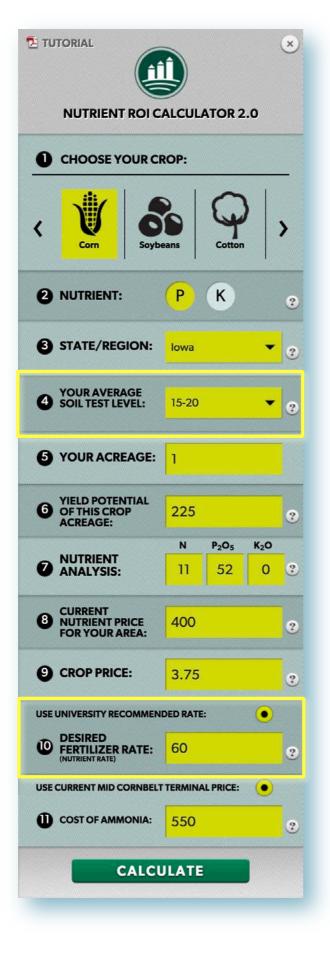


Scenario 2 – Building up a soil test

Click "Change Values" from the results page.

Now let's assume that we are making a plan for the next crop, the new soil test would theoretically be 15 ppm (so change the soil test level to 15-20).

Leave all other assumptions the same, (notice that the university recommendation is 60 lbs of P_2O_5 /acre).



Click "Calculate".

Notice that the results

net return by \$29/acre.

in fertilizer while still

you had made smaller

have gotten to a higher

be required to build soil

test P back up.

