On-farm strip trial: plan and record

FREE TEMPLATE · PROPELMAPPER.COM/TEMPLATES/STRIP-TRIAL-PLAN-AND-RECORD

Follow strip and treatment IDs through layout, application and harvest. Download the plan and raw measurement tables, with space for protocol exceptions. Fill in each field; the grey line under it says what goes there. A filled sample follows the blank form.

Question, field and responsibility

Write the comparison before planting or applying treatments.

Cooperator and field

Identify the cooperator, field and supplied agency reference.

Question

State exactly what differs and cite the written protocol.

Decision the answer will change

Name the decision the result is intended to inform without promising its outcome.

Crop, hybrid and planting date

Retain supplied crop and planting details, distinguishing a hybrid treatment if used.

Trial lead

Name the protocol's responsible lead and contact.

Treatment assignment and physical layout

Keep a map usable by both applicator and harvester.

Treatment (A) and check (B)

Define treatment and check completely under the protocol and current label.

Replications (pairs)

Retain planned and actual replication with block or pair IDs.

Strip width and length

Record applied and harvested dimensions and units, including buffers.

Randomized order

Save actual treatment order and the randomization method.

What you will measure

☐ Stand count ☐ Disease or pest rating ☐ Photos at set stages ☐ Yield monitor ☐ Weigh wagon ☐ Moisture

Identify each measurement and use the same stated method across strips.

Strip observations during the season

Record exceptions before knowing the harvest result.

Strip	Treatment	Rep	Stand (plants / acre)	Rating	Notes

Strip	Treatment	Rep	Stand (plants / acre)	Rating	Notes

Strip: Use the persistent strip ID from the layout.
Treatment: Match treatment to the saved assignment.
Rep: Retain the original block or pair reference.
Stand: Save raw count, sample area, method and locations behind population.
Rating: Use the named protocol scale and observed stage.
Notes: Locate events specific to the strip, including wet ground or application errors.

Actual harvest measurements

Retain the basis for each strip yield rather than only the final number.

Strip	Treatment	Rep	Harvested area (acres)	Weight (lb)	Moisture (%)	Yield (bu / acre)

Strip: Match the harvested strip to its original ID.
Treatment: Retain treatment identity at harvest.
Rep: Keep the block or pair identifier intact.
Harvested area: Save actual width, length, included area and acreage calculation.
Weight: Identify weighing or calibrated-monitor source and keep raw weight.
Moisture: Retain the measured harvest moisture and its method.
Yield: State yield units, moisture basis and calculation reference alongside raw data.

Analysis and the decision it supports

Separate treatment comparison from a price-based margin calculation.

Difference by pair and average

Retain block or pair results, analysis method and reviewer.

Return per acre

Use entered grower price and costs with the stated yield difference.

Conclusion

Explain exclusions without deleting observations and state the decision's limits.

Signature

Sign the reviewed report and preserve the protocol and original measurements.

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SAMPLE · FICTIONAL FARM

Example for Hollis Creek Farm. All people, locations, observations, rates, prices and outcomes in the completed sample are illustrative. They are not recommendations or verified farm results. Hollis Creek Farm is a fictional 1,200-acre irrigated corn and soybean farm in south-central Nebraska.

SAMPLE · Question, field and responsibility

Cooperator and field

Hollis Creek Farm (Ray Hollis), Home quarter, FSA field 7

Question

Does a fungicide at R1 pay on irrigated corn after corn in this field?

Decision the answer will change

Whether to apply fungicide at R1 on all corn-on-corn acres next year

Crop, hybrid and planting date

Corn, one 113-day hybrid, planted April 28

Trial lead

K. Lindqvist, agronomist

SAMPLE · Treatment assignment and physical layout

Treatment (A) and check (B)

A: fungicide at R1, label rate, by ground rig. B: no fungicide. Everything else the same.

Replications (pairs)

6

Strip width and length

8 rows at 30 in (20 ft) by 1,250 ft

Randomized order

From the east fence: A B, B A, B A, A B, A B, B A

What you will measure

☒ Stand count ☒ Disease or pest rating ☐ Photos at set stages ☒ Yield monitor ☒ Weigh wagon ☒ Moisture

SAMPLE · Strip observations during the season

Strip	Treatment	Rep	Stand (plants / acre)	Rating	Notes
1	A	1	33,800	Gray leaf spot, ear leaf, 2 % (R4, protocol scale)	None
2	B	1	34,100	Gray leaf spot, ear leaf, 5 % (R4, protocol scale)	None
3	B	2	33,500	Gray leaf spot, ear leaf, 4 % (R4, protocol scale)	Wet spot at the north end, about 60 ft
4	A	2	33,900	Gray leaf spot, ear leaf, 2 % (R4, protocol scale)	None

SAMPLE · Actual harvest measurements

Strip	Treatment	Rep	Harvested area (acres)	Weight (lb)	Moisture (%)	Yield (bu / acre)
1	A	1	0.574	8,120	18.4	244.0
2	B	1	0.574	7,960	18.1	240.0
3	B	2	0.574	7,890	17.9	238.5
4	A	2	0.574	8,150	18.6	244.3

SAMPLE · Analysis and the decision it supports

Difference by pair and average

Pairs: +4.0, +5.8, +1.1, -1.2, +3.9, +6.6. Average +3.4 bu/acre; differences ranged from -1.2 to +6.6.

Return per acre

3.4 bu/acre x $4.20 = $14.28, less $26.00 product and application = -$11.72 per acre

Conclusion

Small, inconsistent gain this season with low disease. Not enough to change practice on its own; repeat on two fields next year.

Signature

K. Lindqvist, October 22