Is it possible to reduce feed costs with fodder?

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Why fodder?

Heavily advertised
“LOWER YOUR FEED COSTS UP TO 50% WITH FODDER”
“Sprouted grain has more protein / nutrients / etc”
Research / data wasn’t out there for poultry, only for ruminants.
2013-2014 SARE experiment

- Hydroponic Fodder in an Organic Pastured Poultry System: Can feed costs be reduced?
Producing Fodder

Basics of growing your own
Homemade systems
Commercial systems
What to sprout?
Production environment
Production Basics

You need: Space, Water, A tray that drains & somewhere to drain it, light, some temperature regulation.
Soak seed for 24 hours (some people bleach / sanitize during this step)
Drain and spread on tray
Sunday, March 29, 15
Note cotelydons after 1-2 days
Sunday, March 29, 15

Root system development after 2-3 days
We stir the barley around bc watering tends to push them all to one end of the tray
Green shoots start developing 4 - 6 days
They get greener
They start uncurling, 5 - 8 days
Sunday, March 29, 15

7 - 10 days they look like grass and are “fully sprouted”
They will last a while longer in the tray but the seeds can get more moldy and the root mat holds water and stinks more as it gets more dense.
Sunday, March 29, 15
We started with a homemade system, then upgraded to this. Commercial fodder system: Small footprint, large volume. “All inclusive” (“keeping it real” this is how it looks right now.)
12 foot long trays, steel frame
Supply valves with individual shut offs (this brand is quirky and easy to break)
Sunday, March 29, 15
Individual drains, removable elbows
Drain Stack
Yes it leaks some. Bad if you are growing in your house.
Main drain goes outside of hoophouse onto lawn
Challenges in high tunnel: Takes up growing space, too hot, freezes in winter, insects
Challenges indoors: Drainage, space, plumbing, THE SMELL.
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- Alfalfa & clover have tiny seed
How our laying flock lives, so you can gage how this might fit in with your system
Covered wagons & poultry netting, March - November / Dec
Night view, you can see egg laying house, feeders, etc
Sunday, March 29, 15
Separate egg house
Sunday, March 29, 15
Straw Bale Housing w/ outdoor access during the day during winter
Layer Flock Results
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• 2013 - 2 flocks of ~ 50 hens
• Added fodder to one group
• Fodder group had cannibalism & lower egg production, worsening when we reduced bagged feed at all
• Predators ended the experiment early in 2013
Layer Flock Results

- 2014 - Fox in the hen house, not enough hens for 2 groups
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• Later experiments with no control group = consistently lower egg production
• Grant project hopefully extended into 2015
Layer Experiment
Layer Experiment

- Adding fodder to the diet of already-pastured laying hens is likely not useful. It may be worth trying with confined hens.
Broiler experiment
125 birds in each batch
3 groups, each group has its own salatin-style pen
1 pen gets fodder. Could also do 2
Having side by side groups seems especially important for broilers due to highly variable pasture conditions! We add the fodder when they move out of the brooder onto the pasture.
3 batches in 2013. First batch, homemade sprouter pre-grant-money, not enough fodder.
2nd batch, broilers were kinda reluctant to eat fodder. All groups weighed the same at processing, bagged feed reduction slight.
3rd batch, added peas to increase palatability. 7% less weight on 20% less bagged feed

2014: Only one batch. Wheat, peas, oats mix. Fodder group weighed the same on 20% less bagged feed. We also started feeding fodder a week later, right when the “greatest weight gain” started.
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• On our farm, the time to produce the fodder probably cancels out the feed savings, but with a bigger flock it could be worthwhile.