

Profitability—Track your costs

Table 1. Estimated cost of production of sprouted

Iowa State University Economics for 10 Cow Unit	COST/Lbs of Dry Matter
Equipment	\$0.04
Labor	\$0.23
Seed	\$0.12
Water	\$0.01
TOTAL	\$0.40/ lbs of DM

Table 2. Estimated cost/dry matter of dry hay and alfalfa hay

Dry Hay @ \$140/ton and 90% DM = \$0.063/ lbs of DM

Alfalfa Hay @ \$200/ton and 90% DM = \$0.09/ lbs of DM

Calculating your own costs of production, including your labor, is important for determining the profitability of your system, although the health benefits can be hard to measure.

Comparing Nutrients

Table 3. Nutrient Analysis of various forages

Feed	Total Digestible Nutrients (TDN)	Protein	Energy MJME/kg DM)
Barley Sprouts	78.4	16.7	11.8
Rye Grass Hay	68	10.4	10.3
Alfalfa Hay	60	18	9
Barley Grain	84	13.5	12.7

Source: Review of Hydroponic Fodder Production for Beef Cattle, Meat and Livestock Australia Limited 2003



Fig. 1 Sprouted Barley Fodder at Dwight Stoltzfoos' Farm, PA

Germination of the seed is key to unlocking certain nutrients and vitamins.

For more information from producers of fodder, visit our Facebook group at <https://www.facebook.com/groups/sproutedbarleyfodder/>

Sprouted Barley Fodder Fact Sheet

Compiled by Fay Benson and Liz Burrichter



Table 4. Vitamin analysis based on 6-day grass samples (mg/kg DM)

VITAMIN	BARLEY GRAIN	BARLEY SPROUTS
VITAMIN E	7.4	62.4
BETA-CAROTENE	4.1	42.7
BIOTIN	0.16	1.15
FREE FOLIC ACID	0.12	1.05

Source: Cuddeford (1989).

Mold is the number one problem for producers of Sprouted Fodder

Main source of contamination is from the seed. This hydroponic system creates a mold problem that would be taken care of in the field by the soil biology.

Prevention:

- Use high quality cleaned seed
- Clean your system/environment daily
- Disinfect seed with a dilute bleach solution

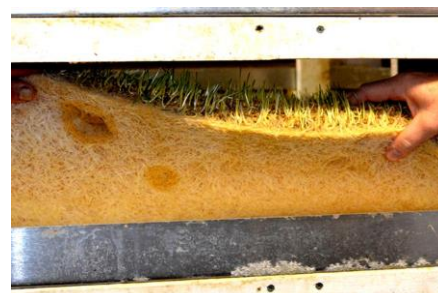


Fig. 2 Mold on sprouting barley

Spotlight on Ken Wilson

He has produced 3200 lbs/day for his 150-cow conventional dairy herd since 2009. He feeds fodder because he's noticed increased feed efficiency in his herd. His cows went from consuming 55 lbs of dry matter to almost 70 lbs after starting to feed fodder. That increased intake allows Ken and his father John to reduce the expensive grain portion of their Total Mixed Ration. "Since we're feeding more forages, our feed program consists of more of what we produce on our farm. We're also dealing with about 20% less manure." While herd milk production dropped to around 80 lbs per cow per day, grain fed per cow dropped from about 28 lbs to 8 lbs. Heel warts have almost disappeared in his confinement herd. Pregnancy rates have gone up. He attributes these benefits to reducing dietary starch.

Fig. 3 Ken Wilson with his fodder system



Table 5. Cost of Ken Wilson's fodder production

Ken Wilson's 150 Cow Unit	COST/Lbs of Dry Matter
Equipment	\$0.003
Labor	\$0.07
Seed	\$0.08
TOTAL	\$0.153/lbs of DM