

SEEDS

Organic seeds

Cost: 1 coin

Non-GMO technology

Yield total: +3 coins per successful field

Rule: Can not use synthetic fertilizers, herbicides, or insecticides on these fields in order for them to produce an organic crop!

PRODUCTS/SERVICES

Land purchase

Cost: 8 coins for 1 field

SEEDS

Basic GMO technology seeds

Cost: 2 coins

GMO traits: Roundup ready, Bt

- Roundup Ready: ability of crop to withstand Roundup herbicide
- Bt: plasmid repels insects

Yield total: +5 coins per successful field

SEEDS

GMO high-yield seeds

Cost: 3 coins

Yield total: +6 coins per successful field

Rule: Must use prescription fertilizer with each GMO high-yield seed field for field to be successful!

Rule: Use Flex ear corn seeds (successful high-yield) in non-drought conditions only!

FERTILIZERS

Basic fertilizer

Cost: 1 coin total per field

- Standard issue fertilizer (equal amounts N:P:K)
- Does not require soil testing

Yield total: +3 coins per successful field

Optional penalty: If you use basic fertilizer in the same field for 3 years in a row, you are penalized 1 coin per round for water quality pollution!

FERTILIZERS

Prescription fertilizer

Cost: 2 coins total per field

- Synthetic fertilizer blend for precision ag equipment
- Sales agronomist reviews soil samples to determine the exact amounts of fertilizer needed for crop production per field.

Yield total: +5 coins per successful field

Rule: must soil test to create fertilizer prescription for successful field!

FERTILIZERS

Natural fertilizer

Cost: 1 coin total per field

- Livestock manure or composted fertilizer

Yield total: +2 coins per field

Rule: Earns +2 coins regardless of field success to reward sustainability and soil regeneration!

CROP PROTECTION

Basic herbicide

Cost: 1 coin total per field

- Roundup herbicide
- Removes weeds from field to reduce competition.

Yield total: +3 coins per successful field

Rule: Seeds must have GMO seed technology!

CROP PROTECTION

Basic insecticide

Cost: 1 coin total per field

- Protects field from insects.

Yield total: +3 coins per successful field

CROP PROTECTION

Biological pest control

Cost: 1 coin total per field

- Employ ladybugs or other natural solutions to protect a field from all pests.

Yield total: +3 coins per field

Rule: Reward for environmentally sustainable product, earn 2 bonus coins regardless of field success!

Rule: Can not be used with chemical pesticides!

PRODUCTS/SERVICES

Soil testing

Cost: 3 coins total for all fields

- Soil nutrient testing per field to determine the necessary fertilizer needed to grow a successful crop.
- One-time purchase for all fields.

Rule: Reduce prescription fertilizer cost per round by 1 coin per field!

PRODUCTS/SERVICES

Microbials

Cost: 3 coins total for all fields

- Help protect crops from weed or insect pests and disease.
- Enhance plant productivity.
- Per-round purchase.

Yield total: +2 coins per successful field

PRODUCTS/SERVICES

Cover crops

Cost: 2 coins total for all fields per round

- Prevents soil erosion.
- Increases water absorption during bad weather events.
- Increase soil structure and soil biodiversity.
- Increases soil temperature in the spring for planting success.

Rule: Gain +1 coin per field for annual carbon sequestration for ecosystem services regardless of success!

PRODUCTS/SERVICES

Tiling

Cost: 4 coins total for all fields

- Installs water drainage tile in all fields to reduce water accumulation in fields.
- One-time purchase.

Rule: Protects all fields from flooding permanently!

PRODUCTS/SERVICES

Irrigation system

Cost: 4 coins total for all fields

- Permanently protects all fields from drought.
- Consumes a high volume of water.
- One-time purchase.

Yield total: +2 coins per field

Rule: Automatically makes all fields successful when rolling a 1 or 2 or experiencing a drought event card!

Optional penalty: If you use regular irrigation for 3 years in a row, you are penalized 2 coins for high volume water usage!

PRODUCTS/SERVICES

Crop insurance

Cost: 3 coins total for all fields

- Per-round purchase.

Rule: Refunds 2 coins for each failed field this round!

Sales agronomist

- **Expert:** The sales agronomist must help each farmer to understand the costs/rules and benefits of each product or service sold.
- **Negotiation:** Let the sales agronomist player negotiate deals to add a social/roleplay element!
- **Flexible Pricing:** Sales agronomist can offer discounts to each farmer or adjust prices based on demands to encourage purchases.
- **Bundling:** Sales agronomist can create product bundles (e.g., seeds, fertilizer and herbicide for 5 coins, etc).