What Does Modern Agriculture Involve?

O Unit **18** Genetics in Agriculture

🖸 Glossary

Ultimately: finally, in the end Target: to select as an object of attention Likelihood: probability

The rise of superweeds

Superweeds are weeds that have become immune to the herbicides used to keep crop-choking weeds in check. This plague has spread across much of the US and has created environmental chaos. It has increased farming expenses and forced farmers to resort to more toxic weed-killers.

How did this happen? It turns out that big agribusiness has spent much of the last two decades selling farmers products that would **ultimately** produce herbicide-resistant weeds. And now that thousands of farms are afflicted by this problem, those same companies are promising new solutions that will just make things worse.

Herbicide-resistant weeds are also symptomatic of a bigger problem: an outdated system of farming that relies on planting huge acreages of the same crops year after year. This system, called **monoculture**, has provided an especially good habitat for weeds and pests and accelerated their resistance to agricultural poisons.

In response, huge companies are now proposing the use of more herbicides on resistant weeds, an approach that ignores the underlying biological basis of most agricultural systems and will inevitably lead to more resistance and a further spiraling up of herbicide use.

What is really needed is support for approaches (which already work and are currently available) that **target** the problem at its source. Scientist and farmers alike have developed, tested, and refined methods of growing crops that reduce the **likelihood** of resistance in the first place, while providing many other benefits for consumers, the environment and farmers themselves.

[Adapted from: The Rise of Superweeds - and What to Do About It, www.ucsusa.org, 2013]





Understanding the text

- Read the text and translate the following verbs and expressions with the help of your dictionary.
 - 1. Keep in check:
 - 2. Spread:
 - **3.** Resort to:
 - **4.** Rely on:
 - 5. Lead to:
 - 6. Spiral up:
 - 7. Target:

Replace each of the adjectives in bold with the correct synonym among those given.

- 1. Superweeds are weeds that have become **immune** (susceptible, resistant, free) to the herbicides that are used to keep crop-choking weeds largely in check.
- **2.** This plague has forced farmers to resort to the more **toxic** (harmful, hostile, harmless) weed-killers.
- **3.** Herbicide-resistant weeds are related to an **outdated** (modern, common, obsolete) system of farming that relies on planting **huge** (vast, tiny, endless) acreages of the same crop year after year.
- **4.** The approach proposed by huge companies ignores the **underlying** (secondary, fundamental, valuable) biological basis of most agricultural systems.

3. Read the text again and provide the information required.

1.	Definition of superweeds:
	Effects:
	Causes:
4.	Solutions proposed by large companies:
5.	Viable solutions: