

# Assignment Sheet 4: BAN-BANANAS

## SCIENTIFIC BRIEFING DOCUMENT

**FROM:** BAN-Bananas (Biodiversity Advocacy Network - Bananas Are Not Natural)

**TO:** Research Associates & Science Communicators

**RE:** Public Education Initiative

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## OUR ORGANIZATION

BAN-Bananas is an alliance of botanists, agricultural scientists, biodiversity advocates, and concerned citizens opposing genetic uniformity and unnatural agricultural practices. We stand for scientific integrity and agricultural diversity.

**We are not anti-science. We are pro-REAL science.**

## OUR FRAME: GENETIC DISASTER IN WAITING

Modern commercial bananas represent everything wrong with industrial agriculture:

- **Genetic monoculture:** 99% are clones (Cavendish cultivar)
- **Unnatural selection:** Seedless, sterile, unable to reproduce naturally
- **Artificial dependence:** Require human intervention to propagate
- **Existential vulnerability:** Panama Disease could wipe out entire species
- **Corporate control:** Patents and genetic manipulation
- **Lost biodiversity:** Hundreds of banana varieties abandoned for one “perfect” clone
- **Playing God:** Genetic engineering without understanding consequences

## YOUR ASSIGNMENT

Create **scientific advocacy material** (white paper summary, educational article, policy brief, lab report-style exposé, or scientific infographic) that:

1. **Makes the case against banana monoculture and genetic uniformity**
2. **Targets one of these audiences:**

- Science-literate consumers
- Agricultural policy makers
- University students
- Farmers and agricultural workers
- Environmental regulators

### **3. Employs scientific evidence and concern:**

- Genetic cloning facts
- Panama Disease threat (Tropical Race 4)
- Historical precedent (we already lost Gros Michel bananas this way!)
- Biodiversity collapse
- Evolution and genetic diversity principles
- Natural vs. artificial selection

### **4. Uses scientific authority:**

- Technical terminology (when appropriate)
- Citations to research
- Logic-based argumentation
- Risk assessment frameworks
- Historical case studies
- Expert warnings

## **SUCCESS CRITERIA**

### **You've succeeded if:**

- Readers understand the genetic vulnerability of modern bananas
- The science feels accessible but authoritative
- Consumers question whether “perfect” produce is actually dangerous
- Policy makers consider regulations on monoculture
- Your piece balances alarm with scientific credibility
- Readers see this as a cautionary tale about agricultural practices

### **You've failed if:**

- You sound like anti-science conspiracy theorists
- The technical details overwhelm the message
- Readers dismiss you as Luddites or fearmongers
- You can't articulate what should replace current banana production
- The piece feels more emotional than evidence-based

- You accidentally advocate for positions you don't hold

## RESEARCH CHALLENGE

Find 3 peer-reviewed or credible scientific sources about:

- Cavendish banana genetic uniformity
- Panama Disease (*Fusarium* wilt) and its spread
- Agricultural monoculture risks
- The extinction of Gros Michel bananas (1950s)
- Biodiversity and species resilience
- Genetic engineering in agriculture

**Critical question:** How do you communicate scientific risk without sounding alarmist? How do you critique genetic uniformity without seeming anti-technology?

## REMEMBER

We're not against bananas. We're against putting all our bananas in one genetic basket. This is basic biology: genetic diversity = species survival. The current system is a disaster waiting to happen—again.

Our ancestors witnessed the Gros Michel apocalypse. Will we repeat their mistakes with Cavendish?

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**TONE OPTIONS:** Scientific paper summary, policy brief, educational article, risk assessment, botanical warning, agricultural analysis, peer-reviewed style opinion piece

**DELIVERABLE:** A scientifically grounded piece that makes agricultural biodiversity compelling and urgent without sacrificing credibility.

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*BAN-Bananas: Because Evolution Had It Right*  
“Diversity is survival. Monoculture is extinction.”

**NOTE:** Please include proper citations. We're scientists, not propagandists.