GEOG 105 Partial Study Sheet for Exam 4

**Closed note written:**

Description of 5 soil forming factors with detail

Why organic farming without restorative agriculture still [may not optimize production or soil health](https://www.youtube.com/watch?v=uUmIdq0D6-A&t=1685s)

**Closed note questions from readings:**

Explain how soil biology contributes to insect and disease resistance in plants

Explain how soil biology contributes to high nutrient and micronutrient availability in soils and uptake in plants

Various historical examples of how the industrialization of agriculture has held back the science about interactions between soil biology and healthy food plant production

**Some facts:**

Mycorrhizal fungi build soil aggregates, allowing rapid infiltration of rainfall

Rapid infiltration of rainfall can eliminate destructive soil erosion and increase soil water

Mycorrhizal fungi are large organisms, so can transfer nutrients over long distances

Mycorrhizal fungi are harmed/destroyed by chemical use, tillage, synthetic fertilizer use, lack of vegetation cover

*Organic matter* is decaying plants and animals, which become *humus.*