

Anaerobic Digestion Process

M. Charles Gould

Extension Educator-Bioproductions and Bioenergy

Agriculture and Agribusiness Institute

Michigan State University

Small Digester Conference

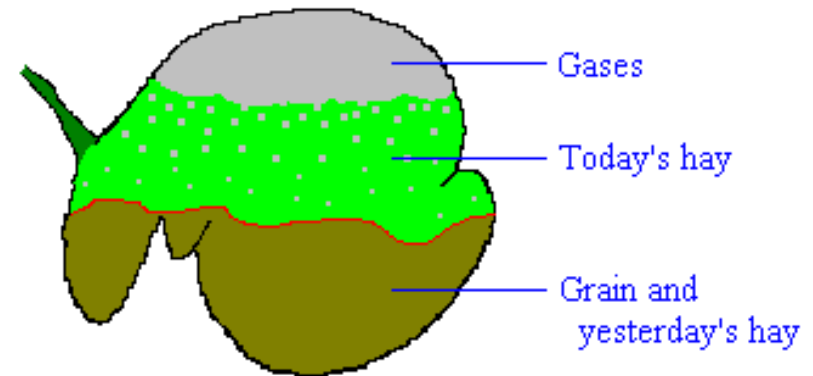
Stevens Point, WI & Holland, MI

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What is Anaerobic Digestion?

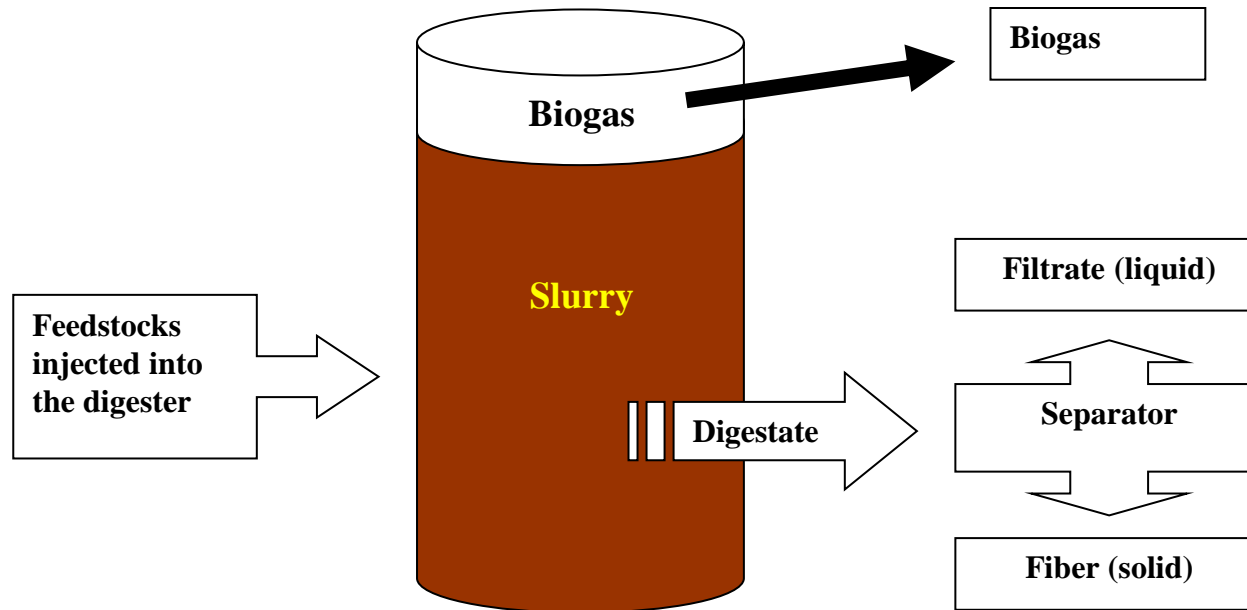
- A biological process that breaks down organic materials (called feedstocks) in the absence of oxygen (anaerobic conditions) into methane (CH_4) and carbon dioxide (CO_2).



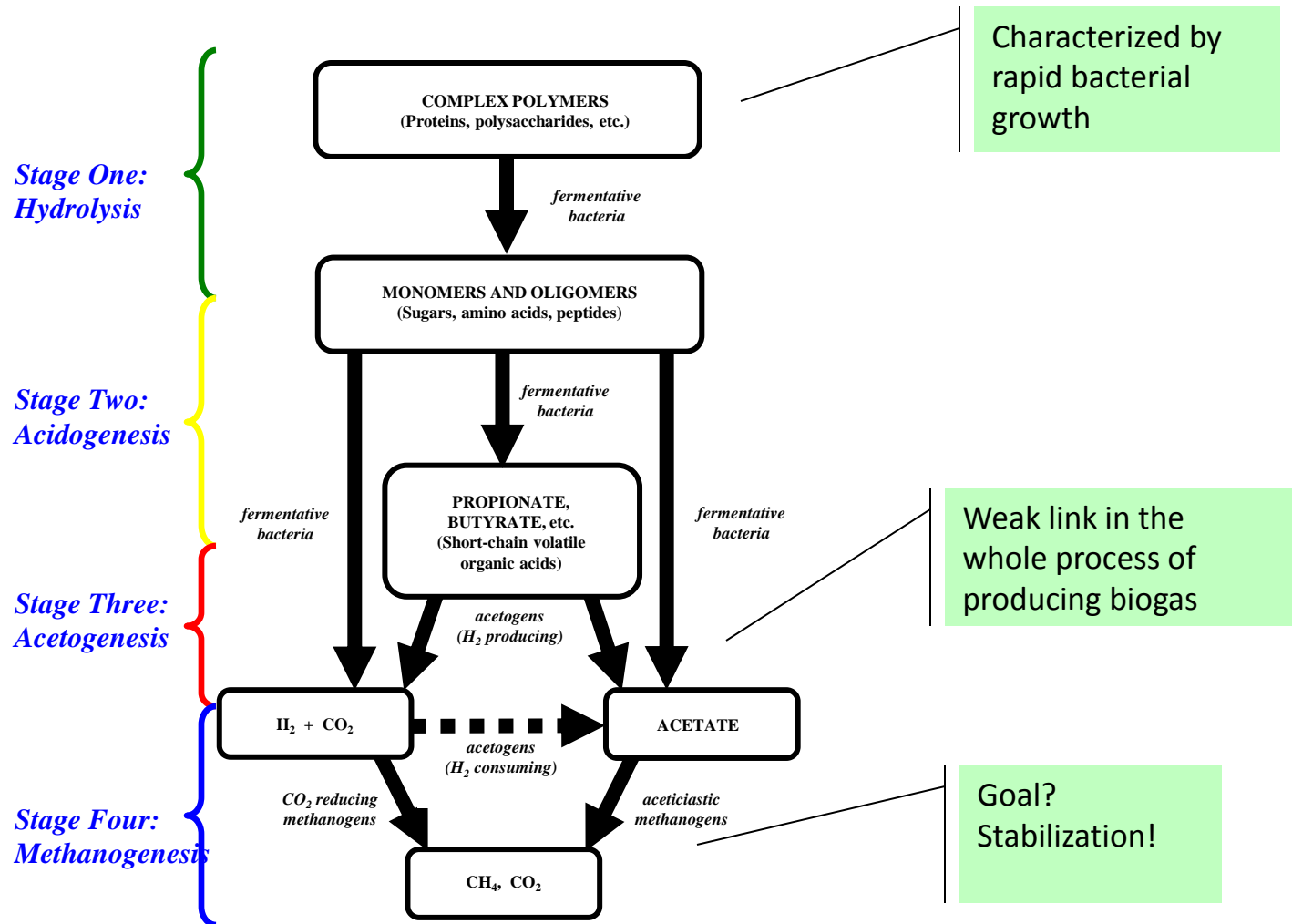
The ultimate fermentation vat...the rumen!



Anaerobic Digestion Process Flow



The Biological Process of Producing Biogas

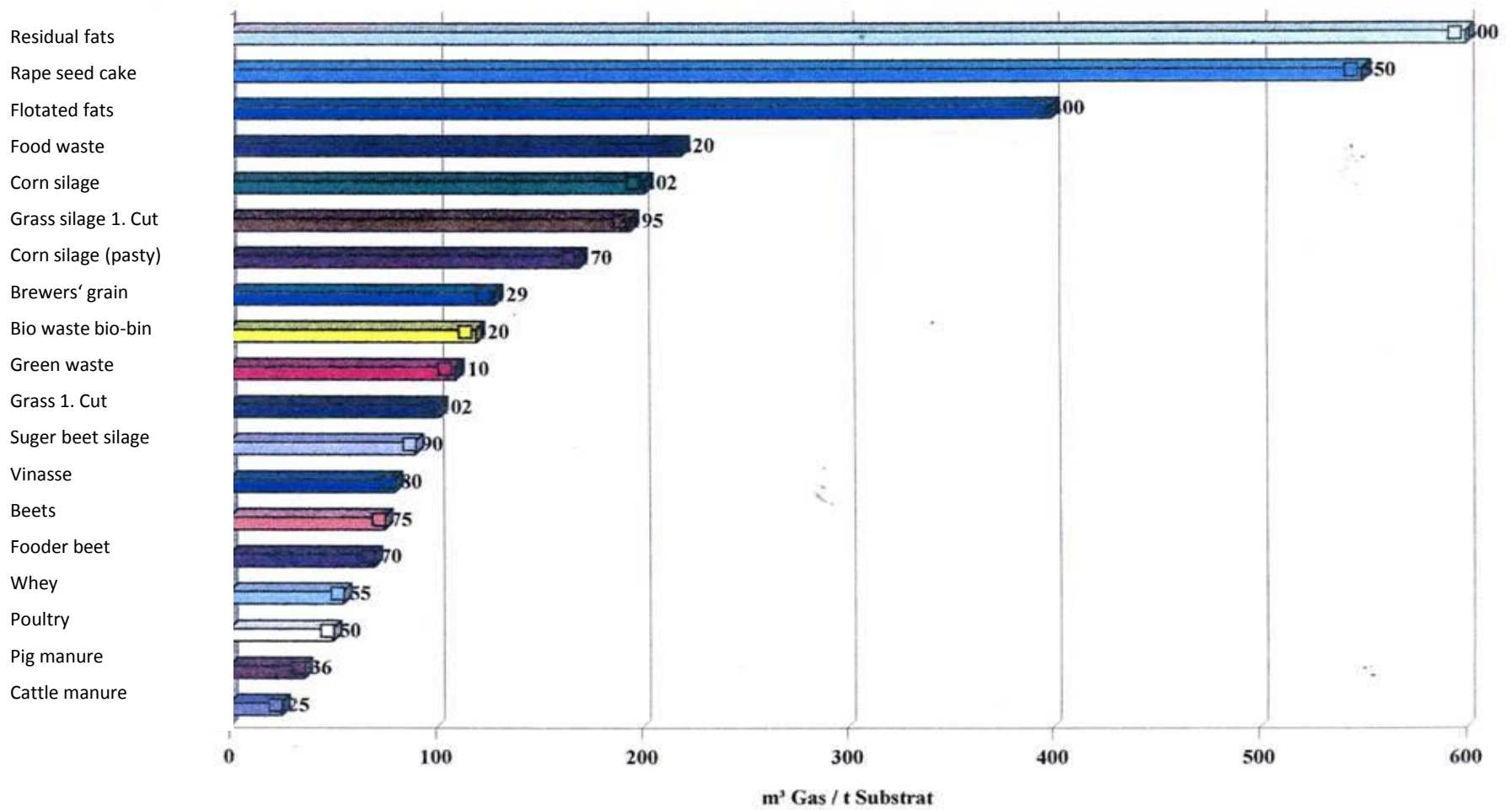


What factors are necessary for optimal digestion?

- Five factors affect digestion:
 - Microbial population
 - Availability and accessibility of food
 - Loading the digester
 - Microbial contact with food (mixing)
 - Environmental factors
- Each of these factors can be monitored and controlled by the operator.



Gas Yields of Different Feedstocks



Impact of glycerin or canola meal on biogas production

- [Placeholder slide]

