



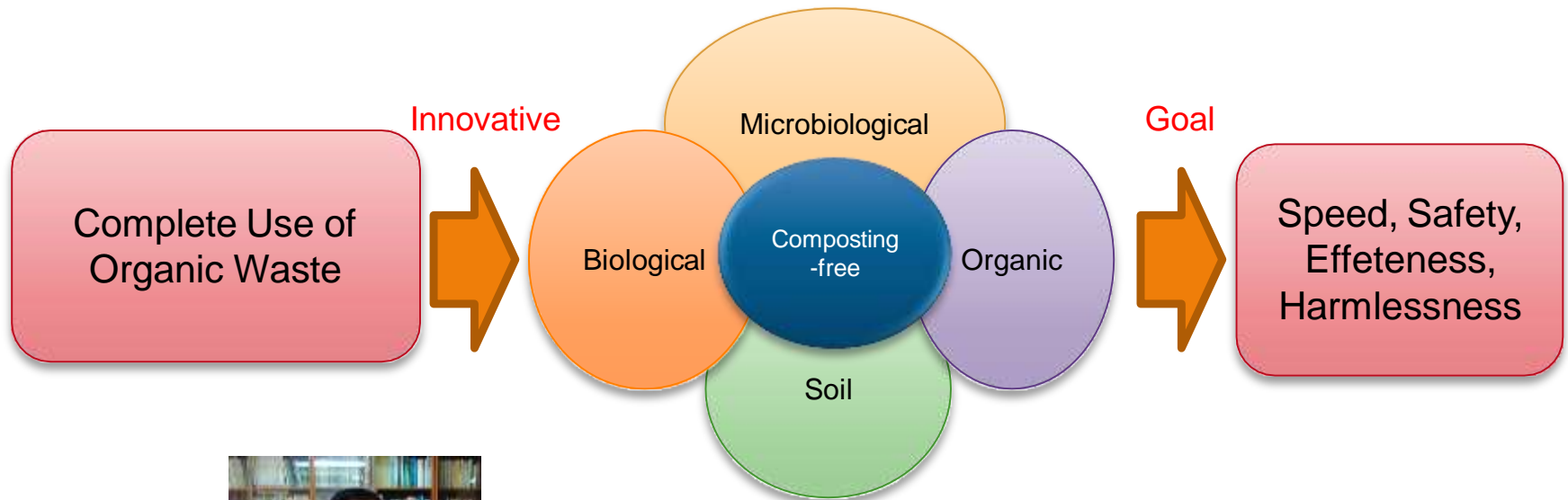
**M.SC, Semester III.**  
**Treatment of Organic Waste**  
Composting-free Technology  
Concepts & Theory



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# Composting-free Technology

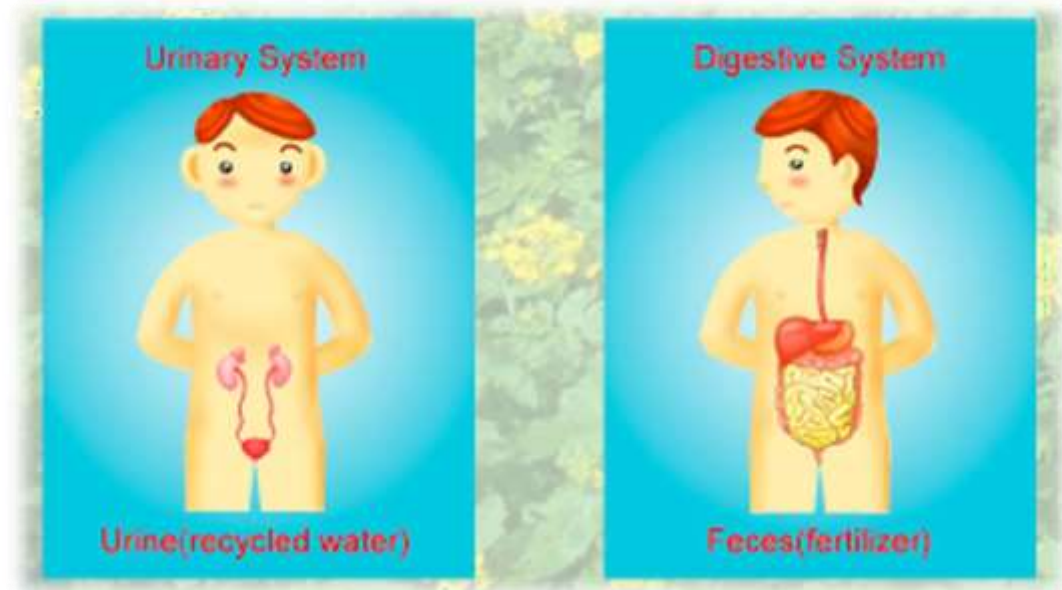
## Concepts & Theory



Invented by Dr. C.C. Young  
Commercialized by Yes-Sun

# What is Composting-free?

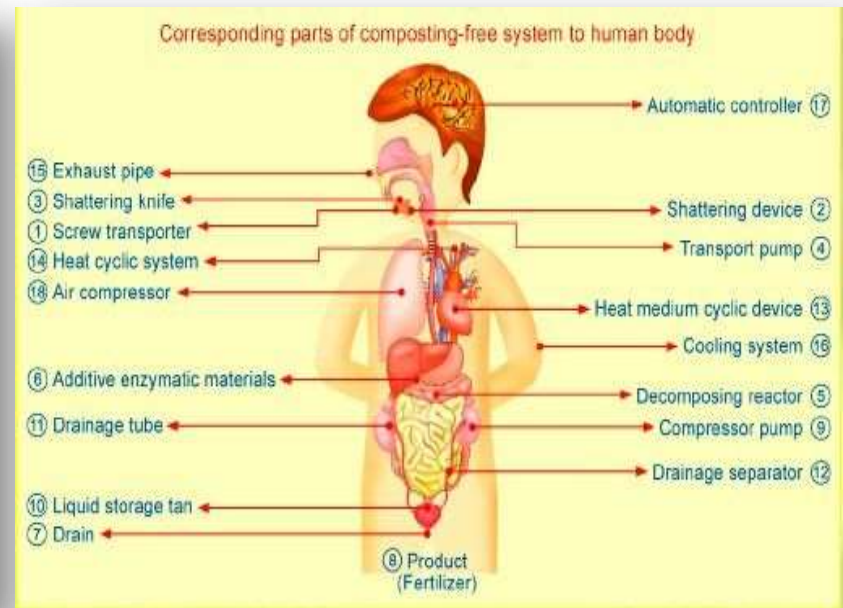
- Composting-free Technology is developed based on the same principles **human digestive system**, Which make the technology easy to understand and operate.



## Introduction

# Concepts of Equipments

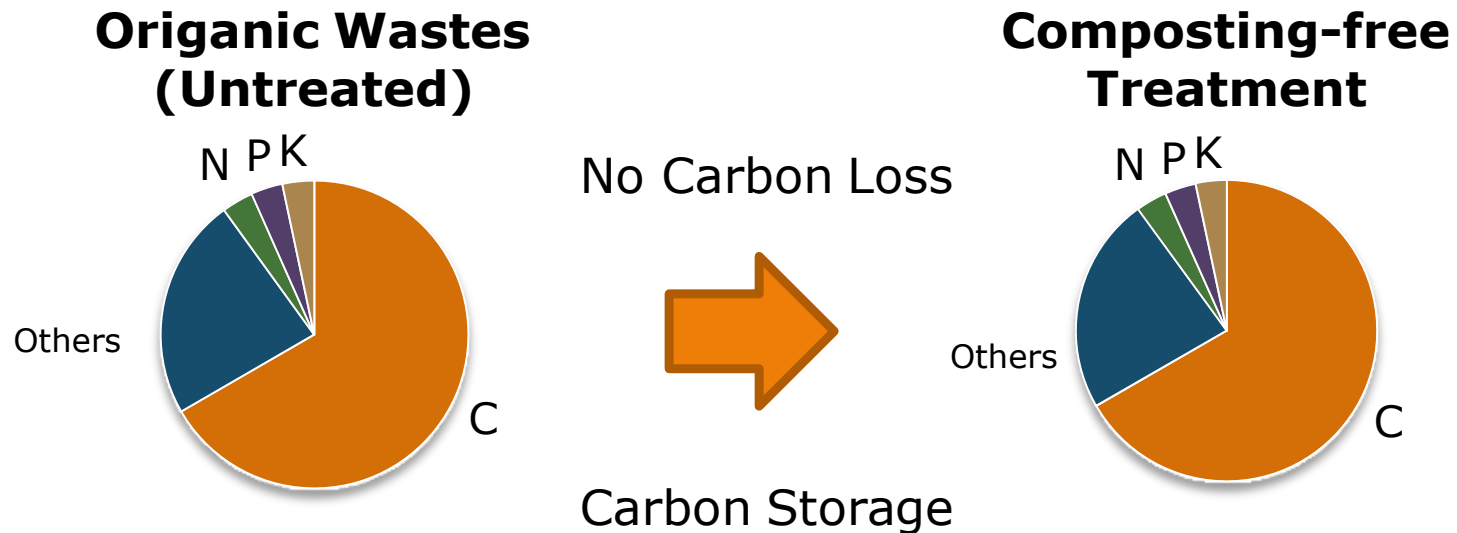
- Composting-free mimics the structure and functions of **human body** and integrates the **mechanical** and **biological** activities using our patented equipments.



## Introduction

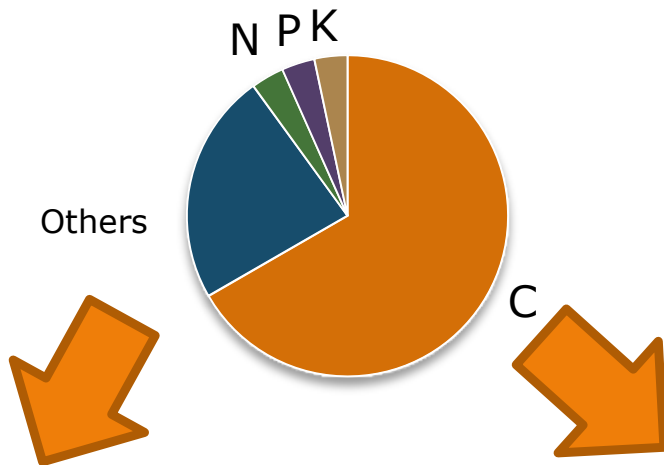
# Carbon Storage

- Composting-free applies **organic enzymes** as catalyst to “**react**” with organic wastes
- Treatment time only 3~8 hours
- Nearly no loss of carbon content

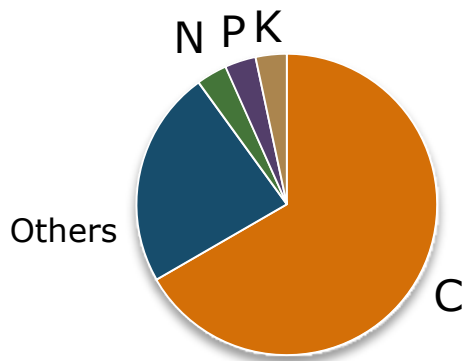


## Introduction

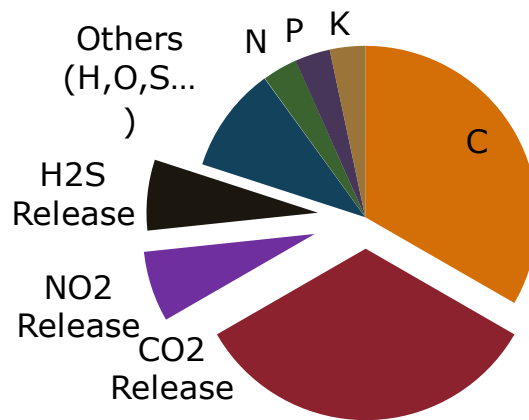
# Organic Wastes (Untreated)



## Composting-free Treatment



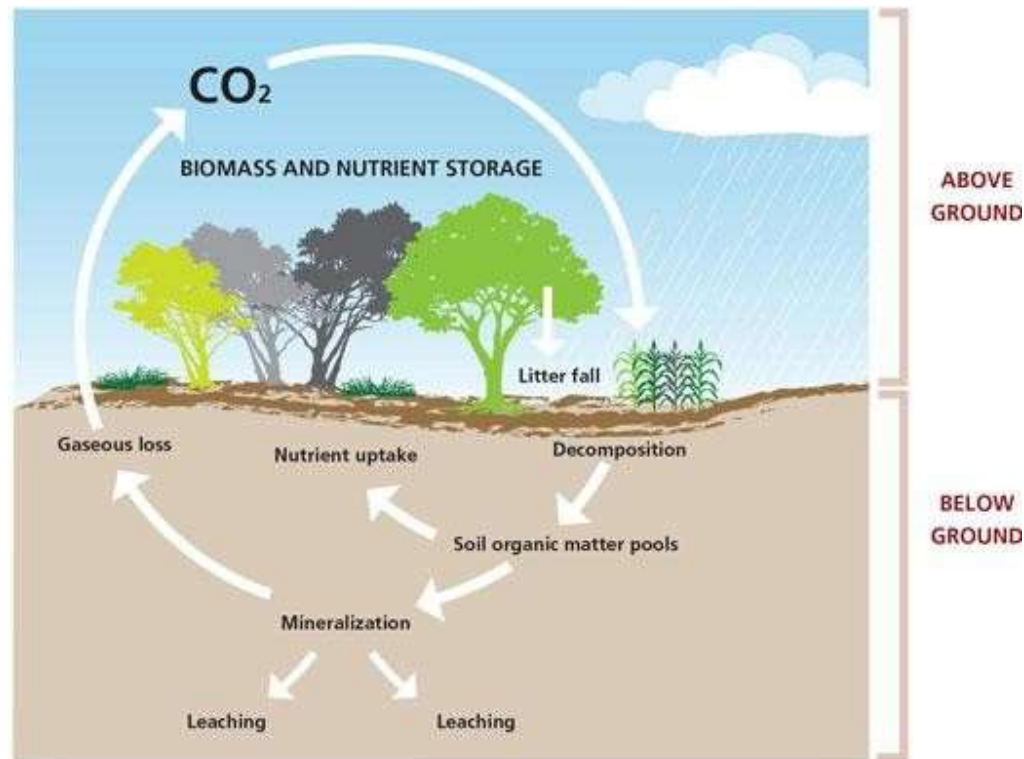
## Traditional Treatment



# Introduction



- Carbon storage is process of removing carbon from the atmosphere
- **Soils** are the largest carbon reservoir



# Introduction

## End Product Comparison Table

Technique Type	Process Period	End Product After Treatment			
		Weight of Solid Material (kg)	Content of Water (kg)	Total Weight (kg)	Water Content (%)
Original Waste Before Treatment	Untreated	20	80	100	80%
Traditional Compost	60 Days	10	5	15	33%
Fast Fermentation	3 Days + 30 Days	10	5	15	33%
Composting-free (No drying process wet fertilizer)	1 Hour	22	80	102	78%
Composting-free (Complete drying process dry fertilizer)	3~24 Hours	22	11	33	33%

# Introduction



# Composting-free vs. Composting

Treatment Method	Composting-free	Composting
Treatment Time	<b>3~8 Hours</b>	3~12 months
Space Requirement	<b>Small</b>	Large
Air Pollution	<b>No Smell</b>	Bad Smell
Water Pollution	<b>Clean Water</b>	High COD Waste Water
CO2 Emission	<b>1~2%</b>	40~60%
End Product	<b>High Quality Organic Fertilizer</b>	Organic Soil Conditioner

## Introduction