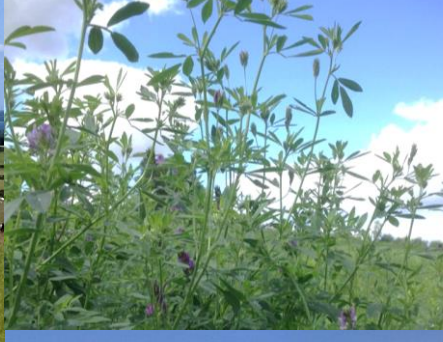


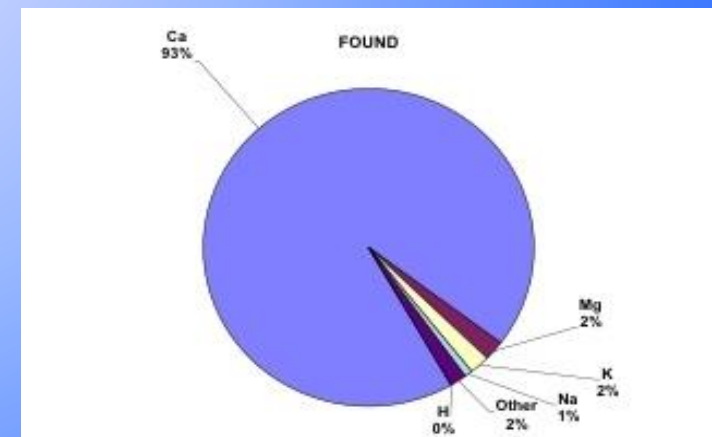
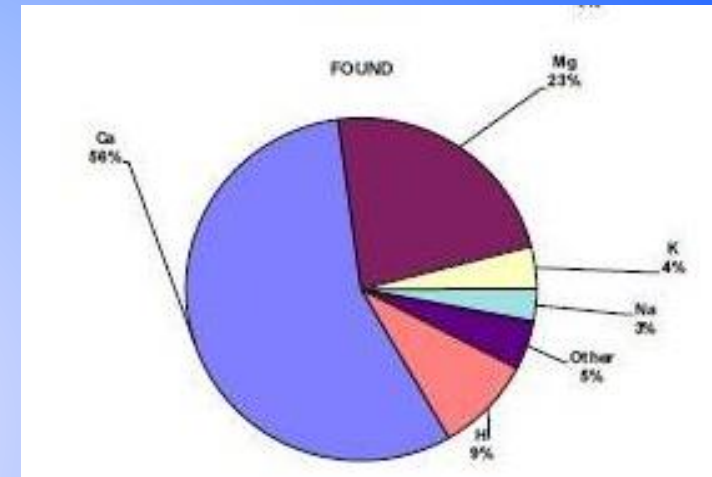
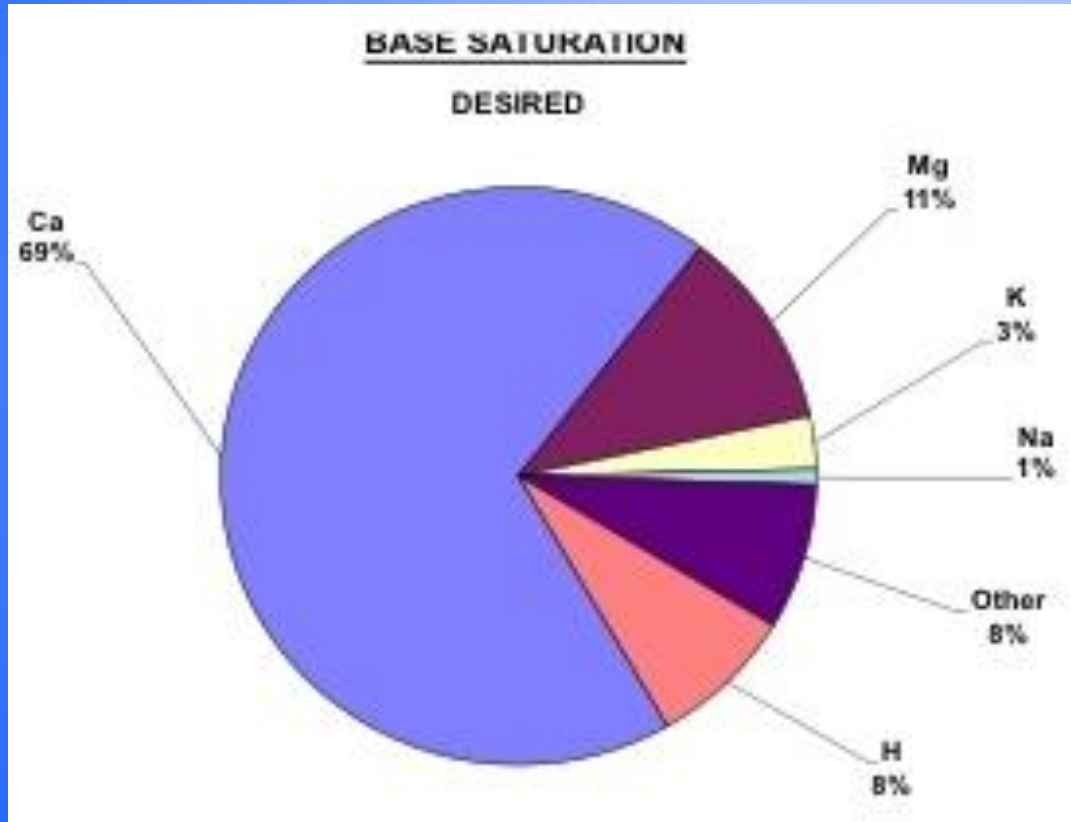
Livestock's Vital role in Soil Regeneration Above and Below Ground



Wil Armitage



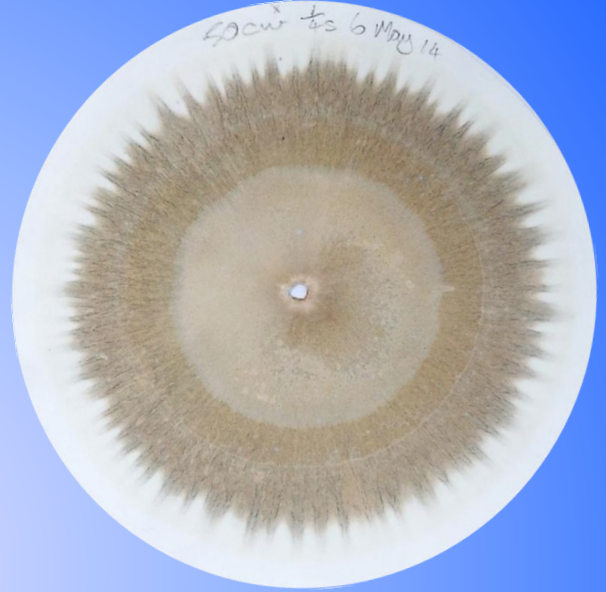
The Albrecht Soil Analysis



Soil Chromatography

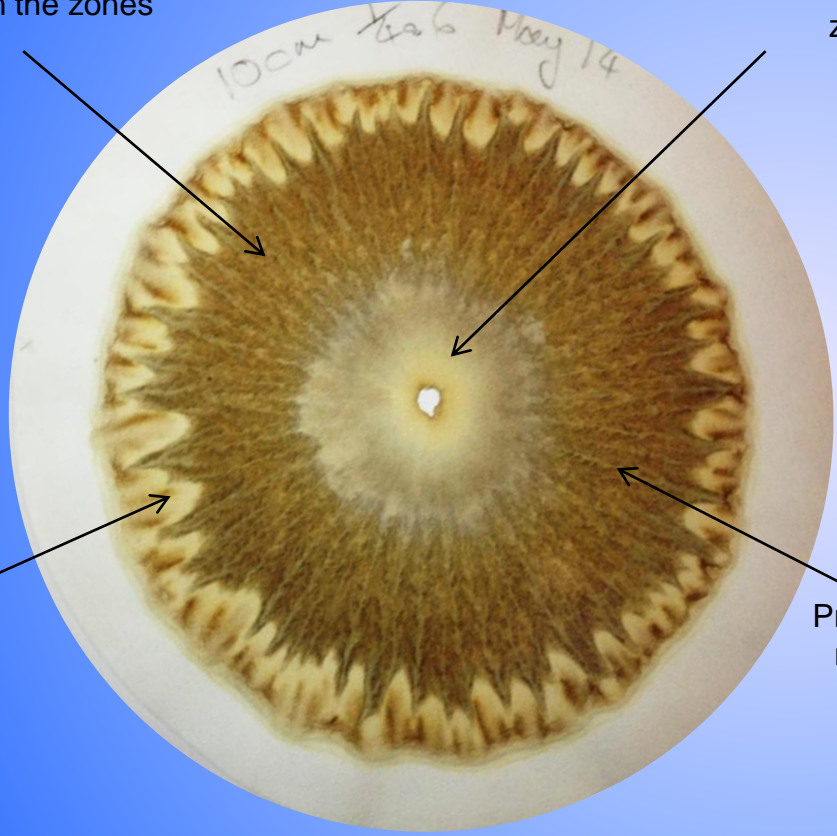
Irregular lines and rays indicate good biological activity between the zones

Internal mineral zone



Peripheral biology zone

Proteic organic matter zone

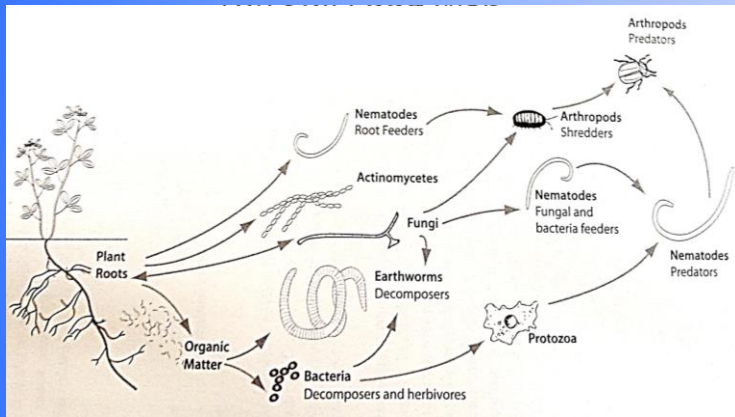


Soil health is the capacity of a soil to function without intervention.

Feeding Biology

BELOW

The Soil Food Web



1-2%?

- 5:1 Bacteria
- 20:1 Fungi
- 30:1 Protozoa
- 100:1 Nematodes

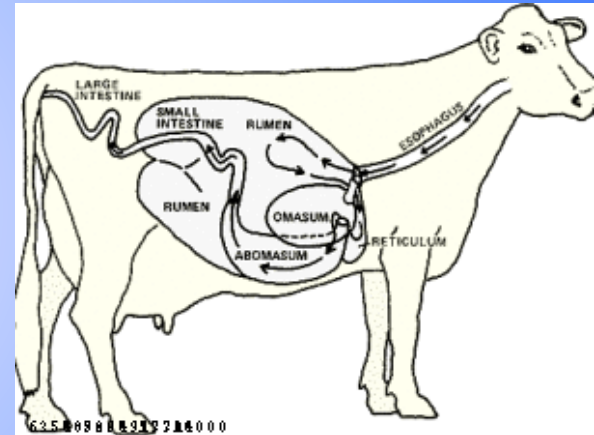
Microbes

Carbon : nitrogen

Quality Food → Digestion ∝ Health

ABOVE

Livestock



896

30:1

Grow Top Soil

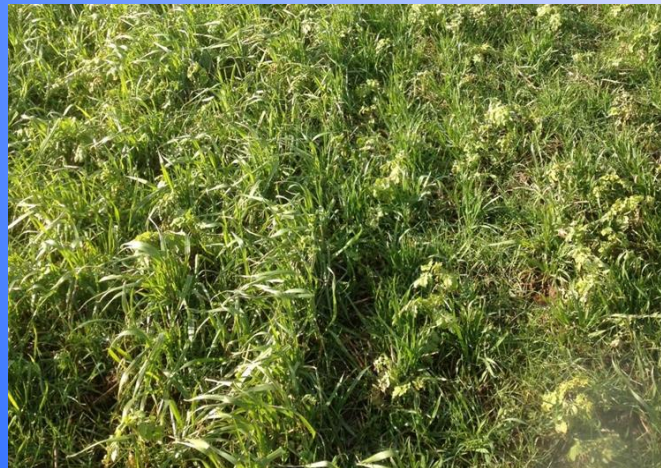


Soil Penetrometer

300 psi

CO₂ & OM

Cover Crops



Maximising photosynthesis
Feeding and protecting soil
biology

Mob Grazing



Maximising plant exudates
Building organic matter
FAST



Plant Diversity & Synergies





Compost

Carbon source

Chelating minerals

A live fertilizer

10x more effective than FYM

Foliar feeds

Carbon source

Mineral suspensions

Energy sources

Urea is an amine

Good Biology



The Quality and Integrity of the feed we produce on farm is a result of the way we manage Our Soils.



Conclusions

- **Soil management** has a direct impact on the **Integrity** of food.
- **Soil biology** and **Plant Diversity** will build **Resilience** and **Efficiency** in our farming systems and increase the **Nutrient Density** of food.
- Massive opportunity to **Multiply Soil Biology** using compost and foliar feeds.
- Plants grown in biological soils are **Less Prone** to **Disease** and **Pest attack**.
- Soluble fertilizers and chemicals will **Shut Down** biological functions, reducing the nutrient density of food.
- 1st generation GM technology is **Mummifying** soil biology, burning off organic matter and producing **Empty Calories** that can not feed the world.

Biological Farming is the Future

Recommendations

- Know your **Base saturation** levels and adopt a fertiliser policy.
- Feed and nurture **Soil Biology** as a priority.
- Use **Plant** and **Soil Microbe Diversity** to improved feed quality and build Resilience in our soils and farming systems.
- Maximise on farm manures to make **Live Mineral Rich Fertilizers**.
- Collaborate with **Arable Farmers** to secure our future.
- **Question** the integrity of any bought in feeds.

**Biological Farming Can Out Perform Chemical Agriculture
And Produce Higher Integrity Feed.**