

MULTILOW



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A MEGAPROJECT FOR
ALL OF HUMANITY

THE RETURN OF LIFE TO EARTH



GLOBAL
MARKET



PATENTED
TECHNOLOGY



INNOVATION



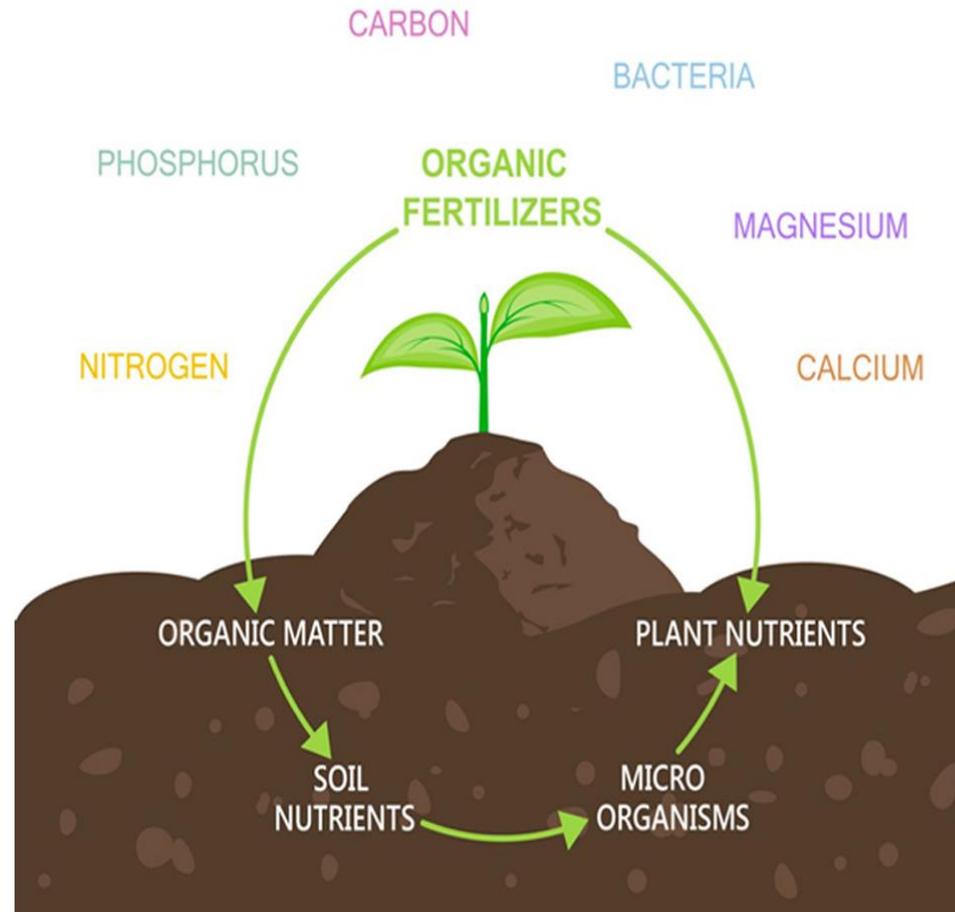
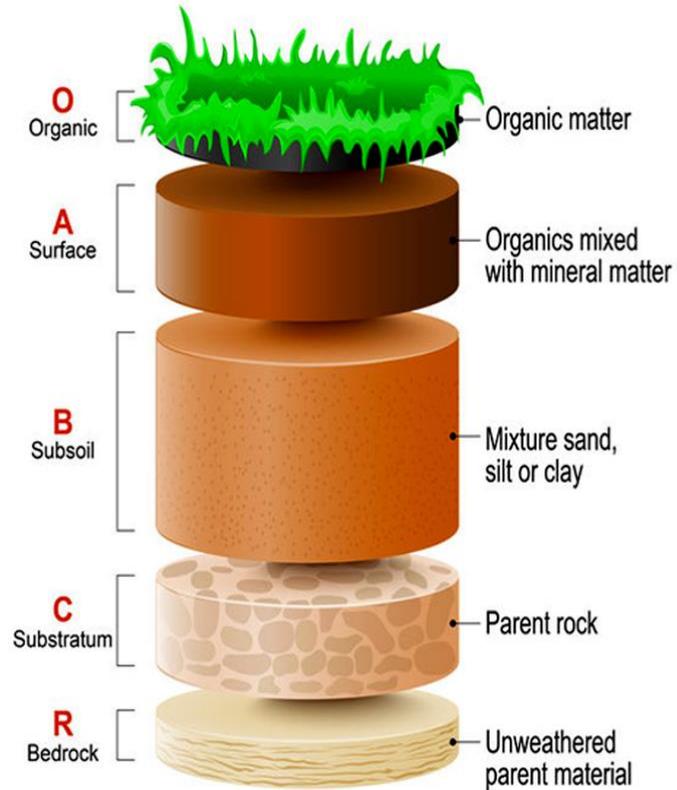
ADVANCED IRON BUTTERFLY
MULTILOW IRON BUTTERFLY

REGENERATION OF AGRICULTURAL SOILS

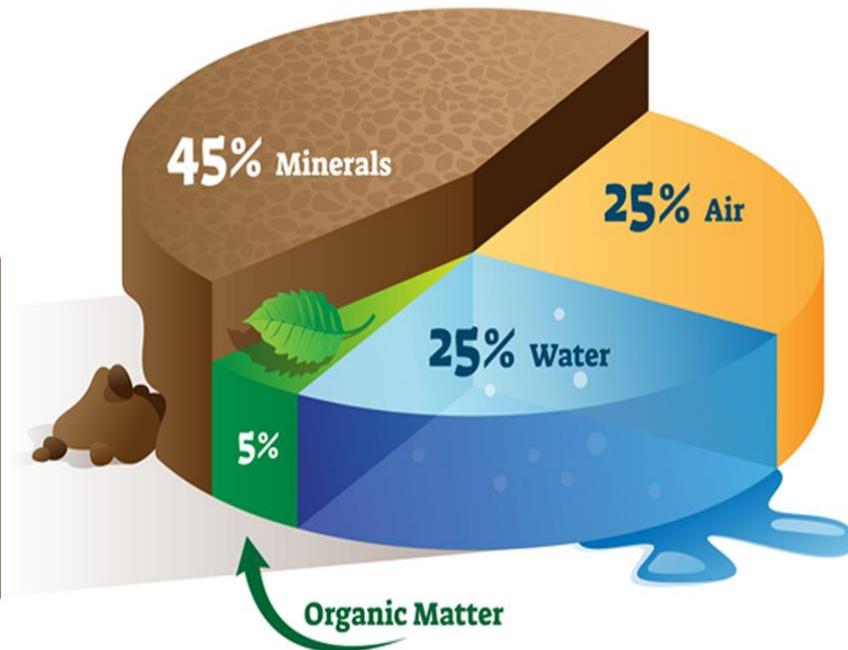
Systemic Analysis of Agriculture.

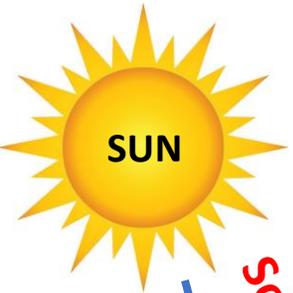
Agriculture is a system supported by and interrelated with other systems, which play a very important and decisive role in final agricultural production.

SOIL LAYERS

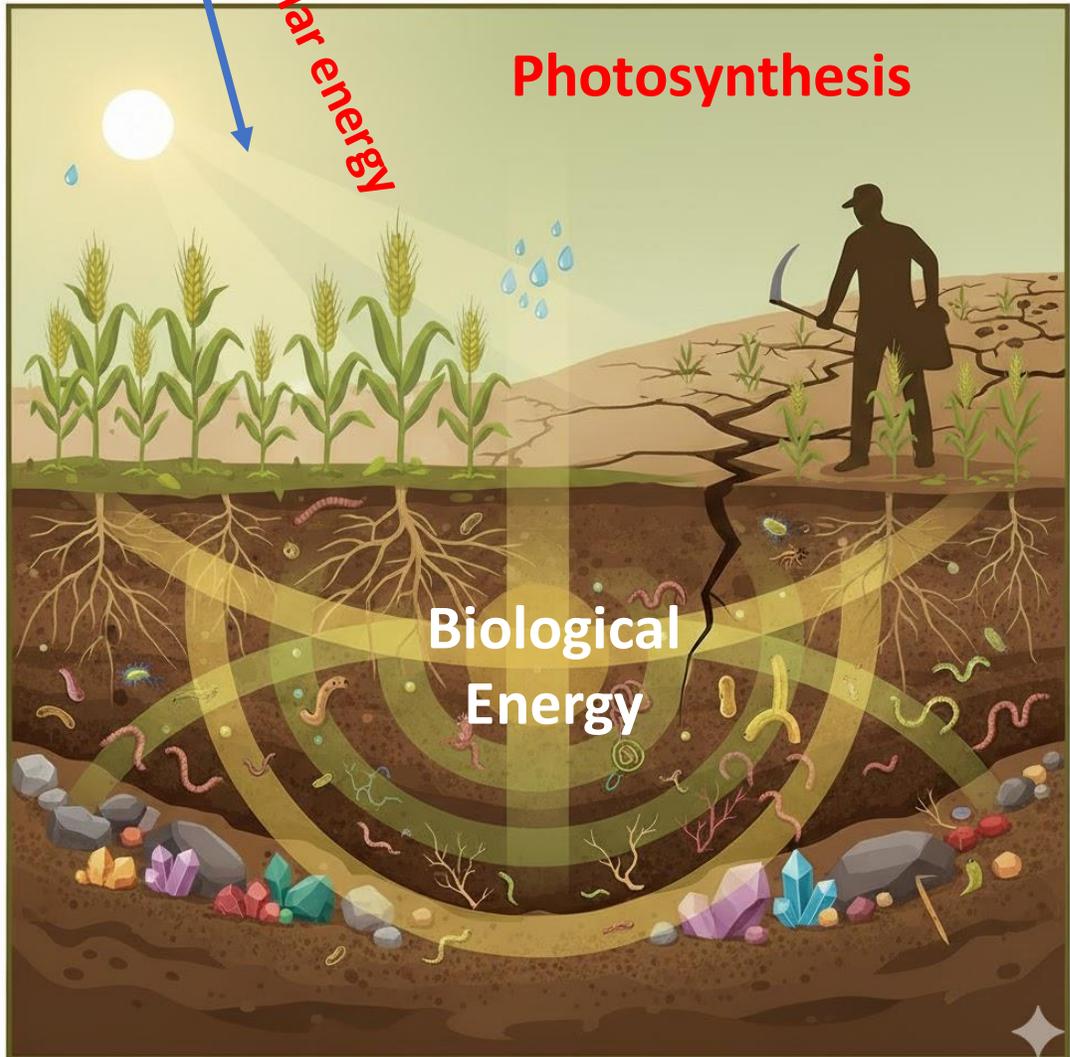


SOIL COMPOSITION

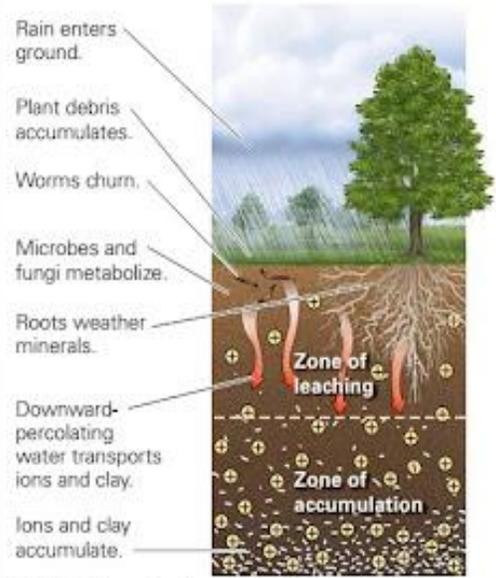




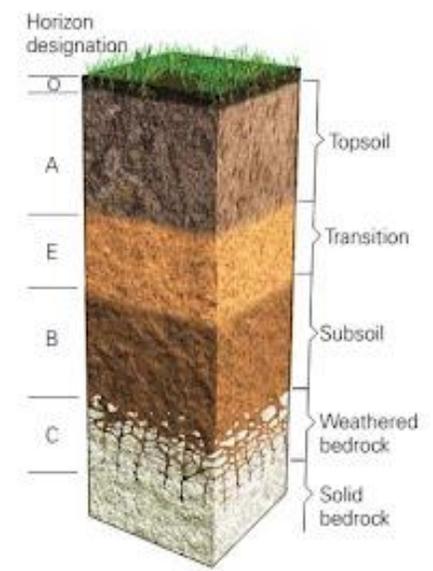
Energy transformation on the planet. Disruption of natural life cycles in the soil.



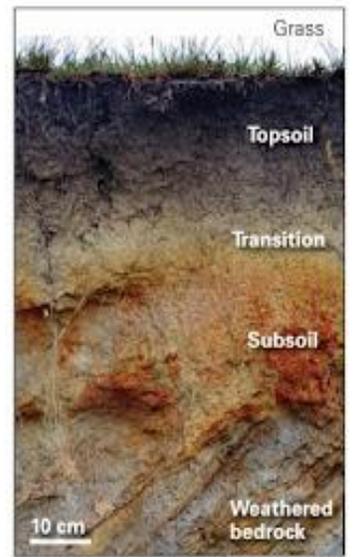
Soil is a system whose components are minerals and living organisms, and therein lies the key that determines the planet's capacity to produce energy, food, and raw materials to sustain life, which is disrupted if the system breaks down.



(a) Soil character depends on climate, for climate controls rainfall and vegetation.

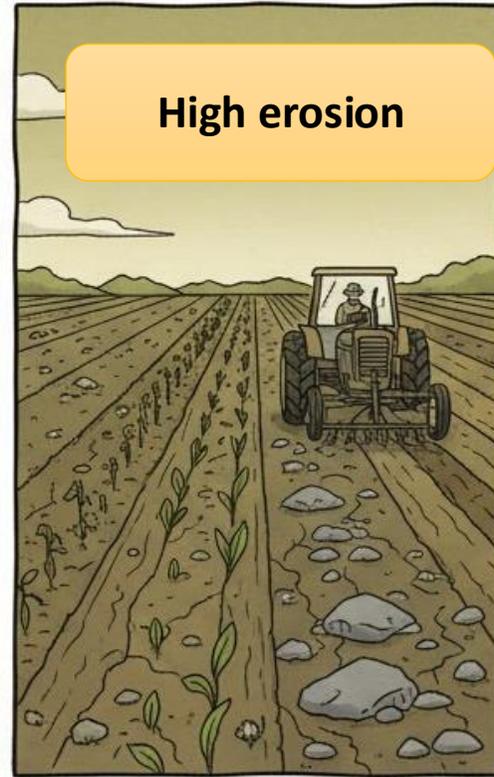
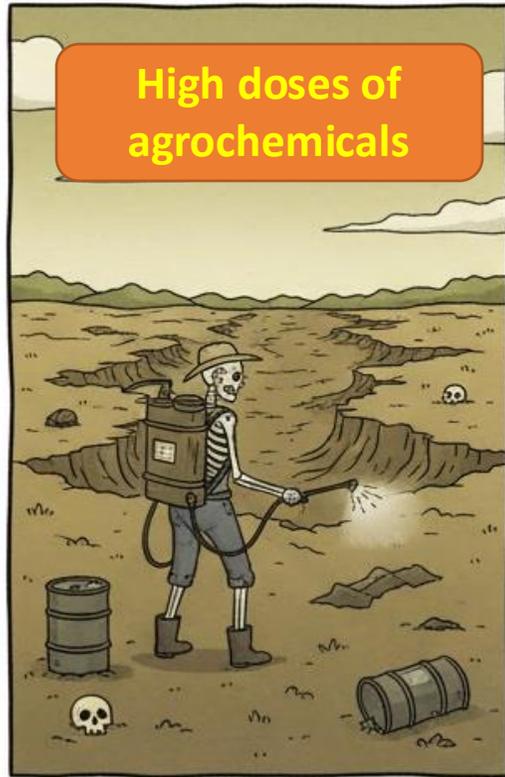


(b) Distinct soil horizons develop, each with a characteristic composition and texture.



(c) Soil horizons exposed on the wall of a gully in eastern Brazil.

FACTORS THAT LIMIT PRODUCTIVITY IN MODERN AGRICULTURE

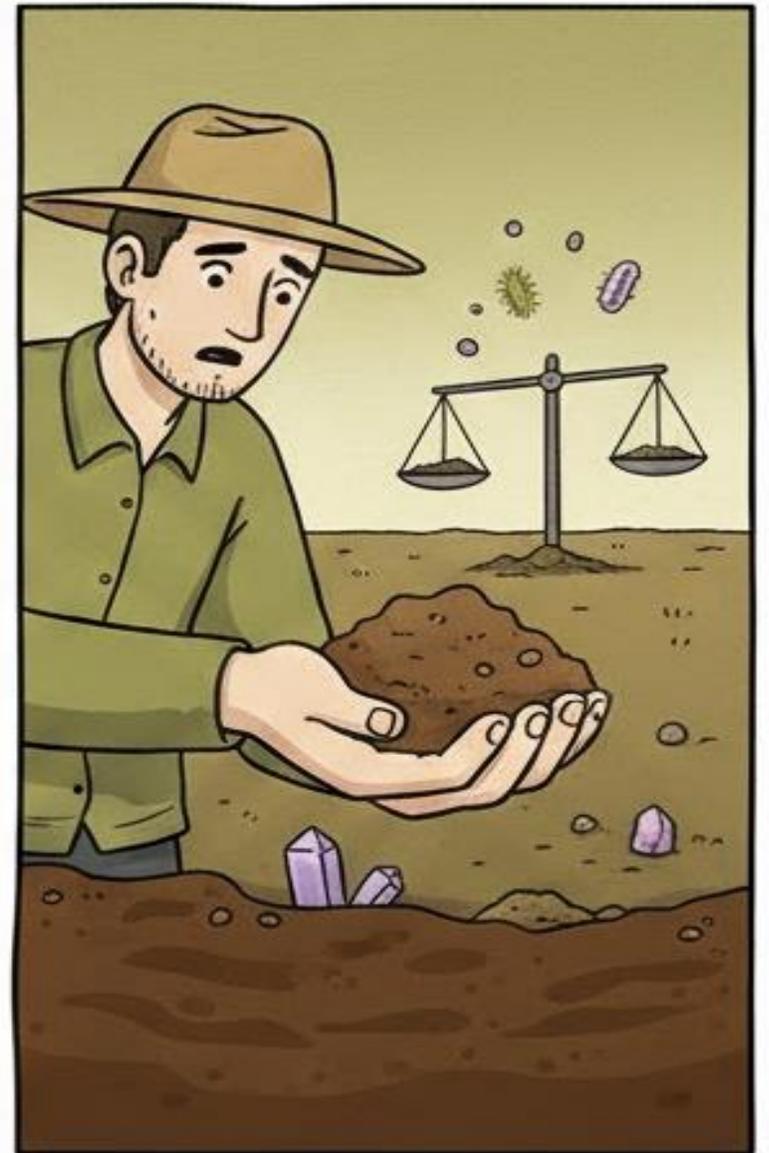
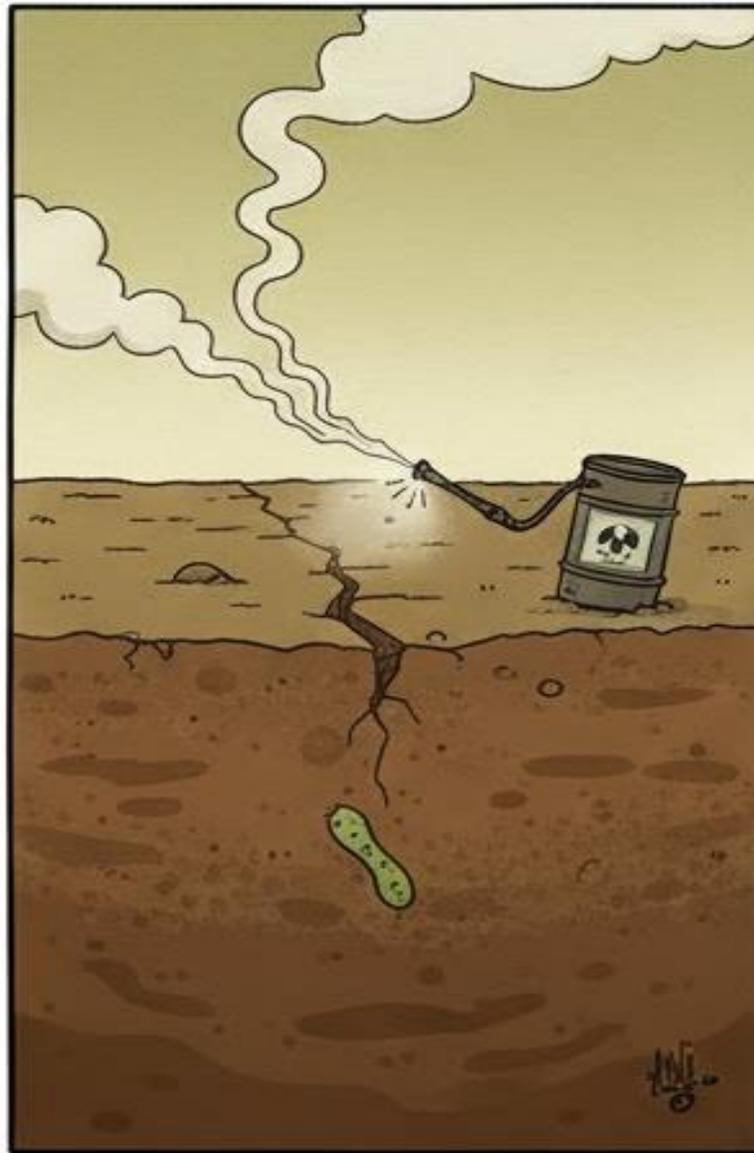
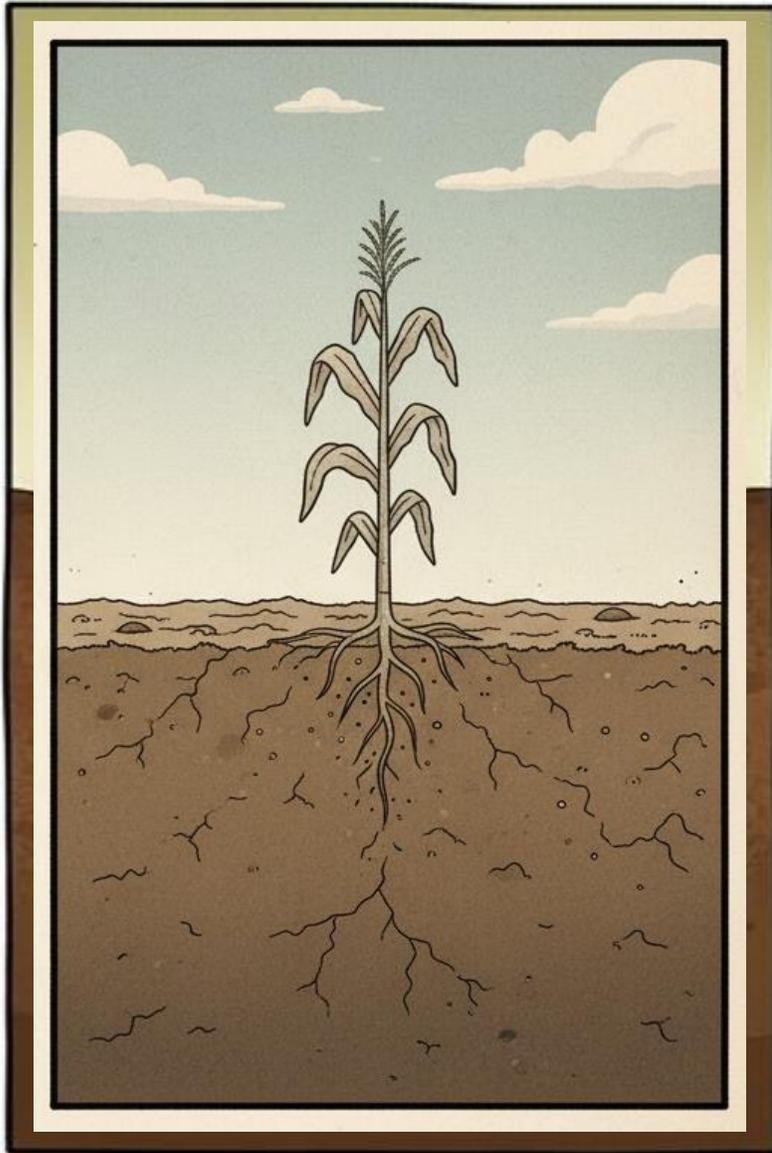


Disruption of the cyclical systems involved in agriculture.

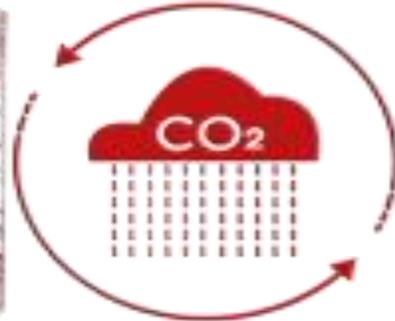
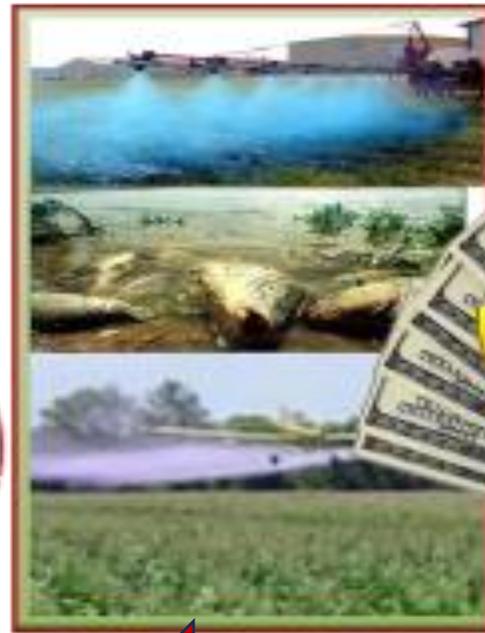
Insufficient nutrient absorption. Poor drought resistance. Loss of the protective barrier around the roots, leading to invasions by pathogenic microorganisms. Frequent lodging in crops.

High soil compaction

FACTORS THAT LIMIT PRODUCTIVITY IN MODERN AGRICULTURE: RADICULAR WEAKENING-ELIMINATION OF MICROFLORA-DEMINE- RALIZATION



NEGATIVE EFFECTS ON THE SOIL, DUE TO THE INDISCRIMINATE USE OF CHEMICAL PRODUCTS.

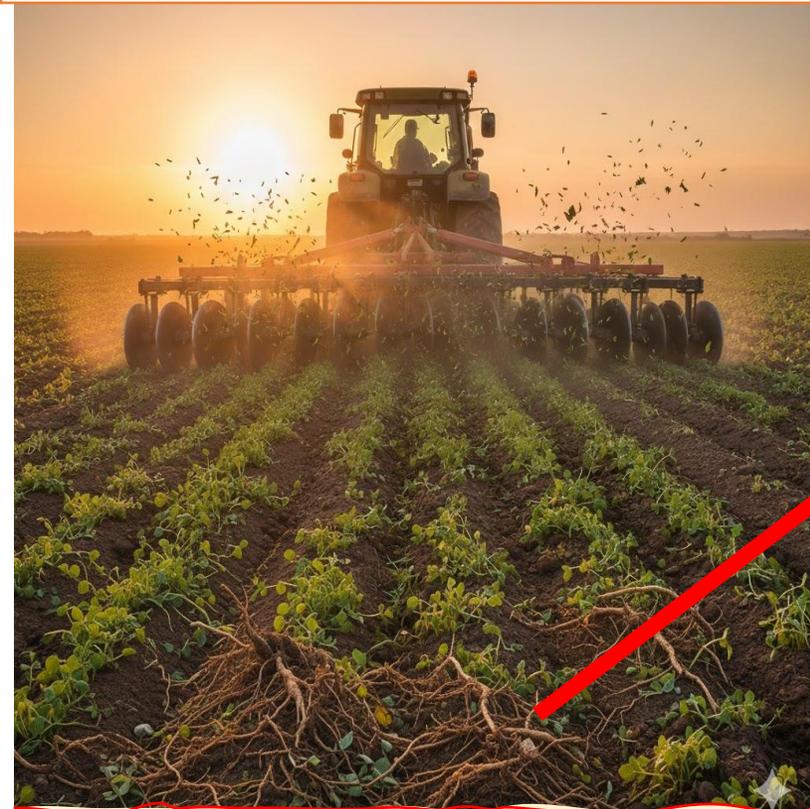


TRADITIONAL TECHNOLOGY →

← **SOIL COMPACTION, MORE AGROCHEMICALS**

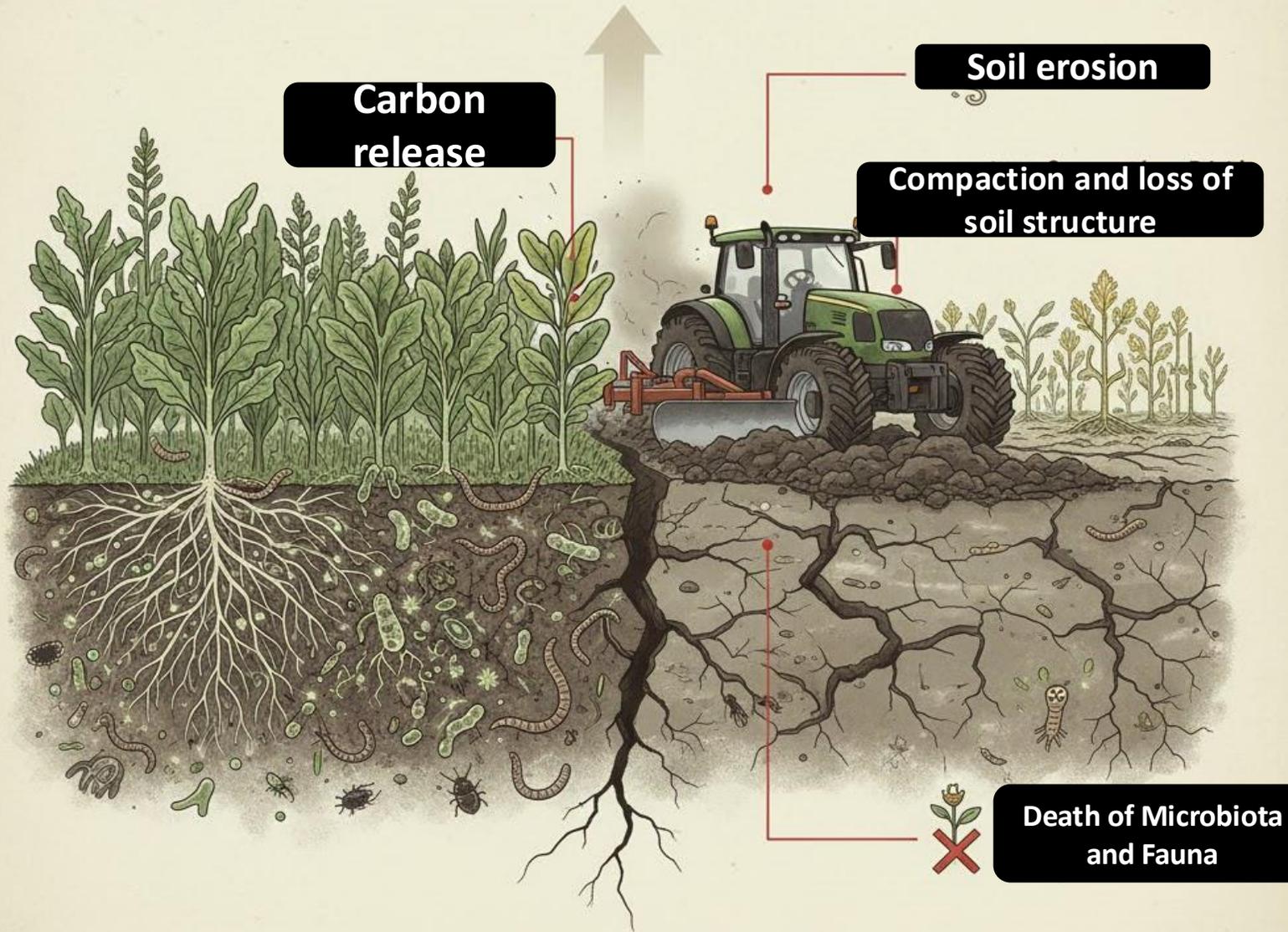


VERTICAL CUTTING TECHNOLOGY



The disc harrow, with its incisive action, not only cuts through existing weeds but also disintegrates and disperses them. This process, far from eliminating them, exponentially increases their ability to regrow, spreading their fragments and seeds throughout the field, ensuring even denser and more vigorous growth in the future.

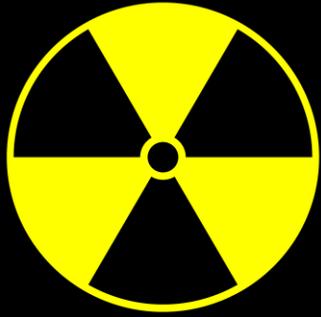
Traditional tillage technology, based on plowing and turning over the soil, has long been the predominant agricultural practice. However, this practice, despite its long history, presents a number of negative effects on both the soil and the environment.



Increased Pollution Nutrient Leaching:
The loss of vegetation cover and increased erosion increase the risk of nutrients and pollutants leaching into groundwater.

Greenhouse Gas Emissions:
The release of organic carbon from the soil during decomposition contributes to global warming.





AGROCHEMICALS

Their indiscriminate use contaminates soil and water sources, affecting marine and terrestrial biodiversity and decimating populations of fish and beneficial insects. Furthermore, exposure to these products causes serious health problems in humans, ranging from irritations to chronic diseases. Ultimately, the overuse of agrochemicals degrades ecosystems and compromises the sustainability of life on the planet.



INCREASED PRODUCTION COSTS

1. Fuel & Energy



INCREASED PRODUCTION WITH TECHNOLOGY

2. Fertilizers & Pesticides



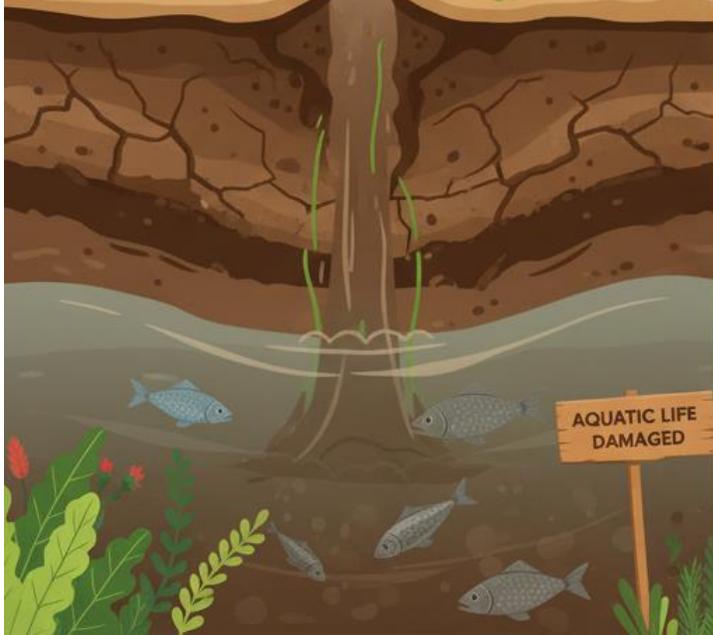
TRADITIONAL TILLING



SUSTAINABLE FARMING



3. Water Pollution



Key Benefits: MULTIARDO-ANC Technology

The Revolution in Horizontal Tillage & Sustainability

I. Economic Impact



Operational Savings:

Reduces total costs by >75% by eliminating soil compaction.



Fuel Efficient: Saves >60% on diesel consumption by consolidates tasks in one pass.



Fewer Chemicals

Reduces fertilizers (60%) and agrochemicals (up to 90%).

II. Soil & Water Management



Water Efficiency: Superior savings of >60% on irrigation water due improved structure.



Soil Health: Conserves moisture, eliminates soil salts, and reverses and improved compaction.



Climate Mitigation: Only implement that doesn't expose Carbon to the atmosphere.

III. Productivity & Functionality



High Yield

Significant increase in agricultural yields and nutritional quality.



Integrated Work

Simultaneous weeding, ridging, hilling, and subsoling.



Functionality:

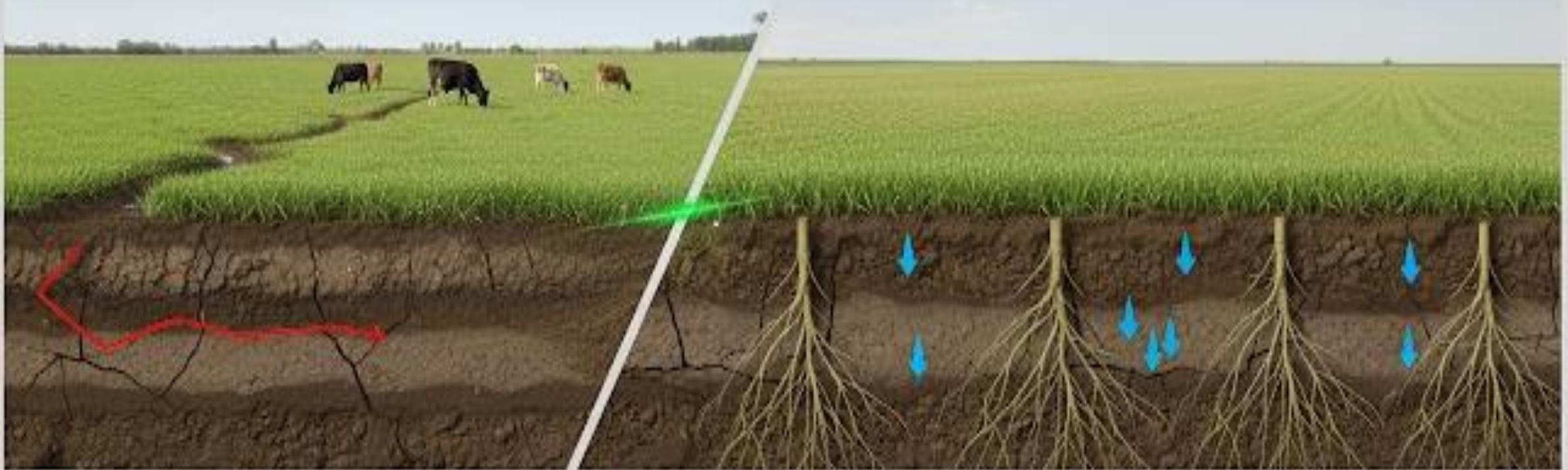
Deep preparation without layer inversion (Patent No. 420501)



“Technology that restores soil life while maximizing producer profitability.”

[Scientific Foundation: <https://multiplow.org/fundamento-cientifico>]

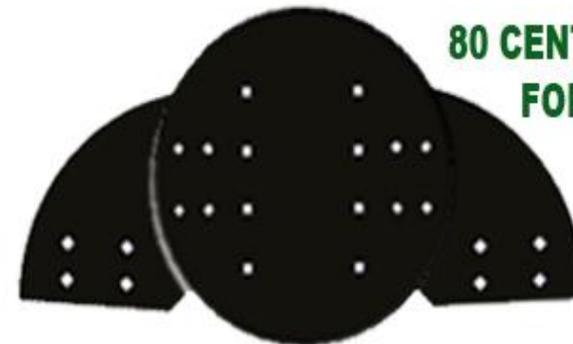




WITH MULTI-PLOW THE USE OF **AGROCHEMICALS** IS REDUCED, EVEN TO THE POINT OF ELIMINATING THEIR USE ALTOGETHER.

Performance, efficiency, and environmental protection IN A SINGLE IMPLEMENT.

More profits, fewer problems, greater sustainability. More hectares, less impact.



**80 CENTIMETERS OF CUTTING LENGTH
FOR EACH WORKING ELEMENT**



5 IN ONE

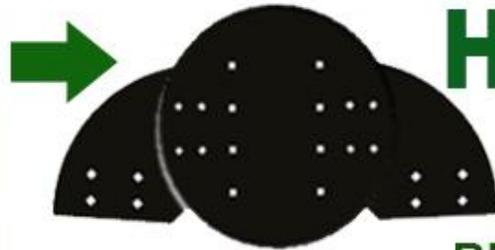
- 1- SUBSOILER (included)
- 2- CULTIVATOR (included)
- 3- FURROWER (included)
- 4- DISC HARROW (not necessary)
- 5- DISC PLOW (not necessary)



WITH THE MULTI-PLOW, THERE IS NO NEED TO USE HARROWS OR VERTICAL DISC PLOWS; THE SAME IMPLEMENT PERFORMS THESE TWO TASKS HORIZONTALLY, WITHOUT INVERTING THE SOIL LAYERS.



FUSE SCREW
IMPACT PROTECTION



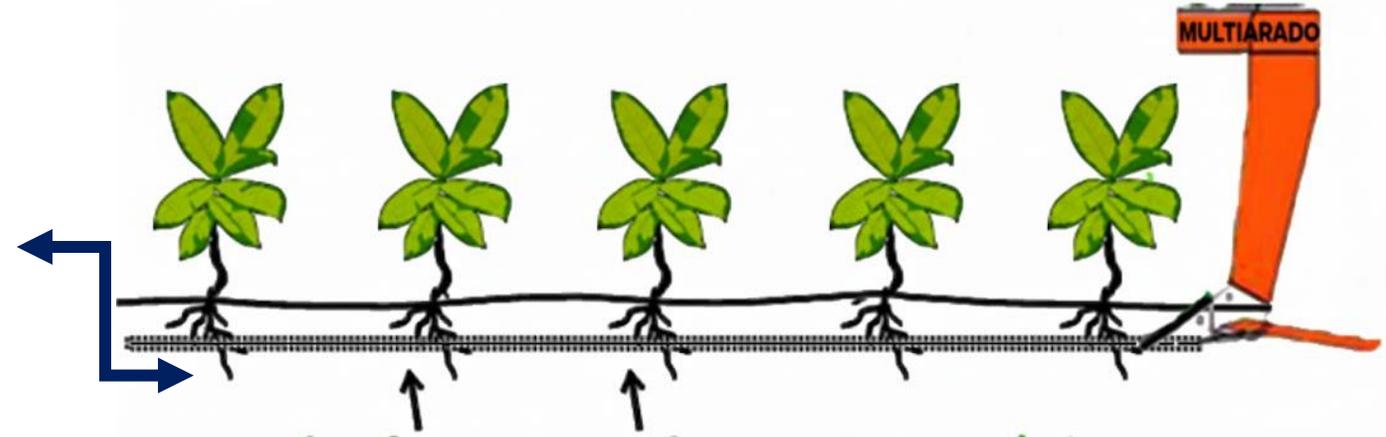
HORIZONTAL CUT



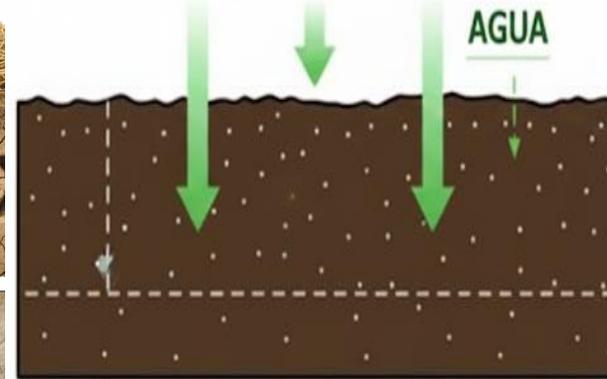
REVERSIBLE BLADES AND TIPS

WITH DOUBLE THE SERVICE LIFE. MADE WITH HIGH-HARDNESS STEEL.

WEED CUTTING FROM THE ROOTS WITH THE MULTI-PLOW



OXYGENATION, SOIL DECOMPACTION, AND WEED REMOVAL IN A SINGLE PASS!



WE MANUFACTURE ACCORDING TO YOUR TRACTOR'S POWER

MODEL MH2



X 2

MINIMUM POWER OF 60HP

MODEL MH3



X 3

MINIMUM POWER OF 70HP

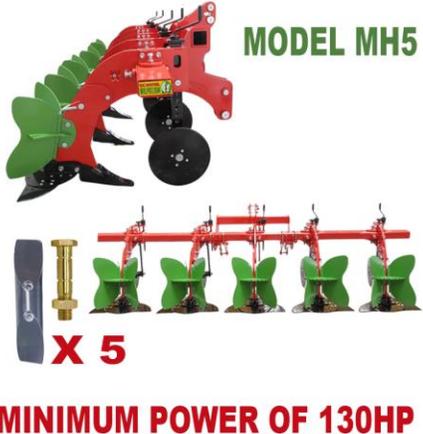
MODEL MH4



X 4

MINIMUM POWER OF 90HP

MODEL MH5



X 5

MINIMUM POWER OF 130HP

MODEL MH6



X 6

MINIMUM POWER OF 160HP

PRO MODELS
(ARTICULATED)

MODEL MH7 PRO

ARTICULATED



X 7

MINIMUM POWER OF 170HP

MODEL MH8 PRO

ARTICULATED

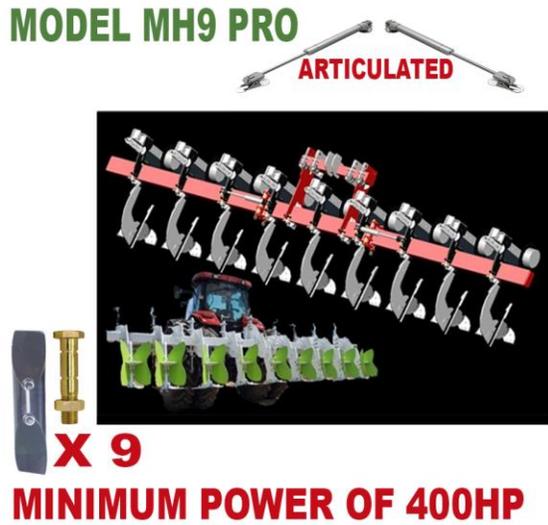


X 8

MINIMUM POWER OF 250HP

MODEL MH9 PRO

ARTICULATED



X 9

MINIMUM POWER OF 400HP

Livestock Farming and Environmental Impact A Global Challenge

Soil compaction in pastures and forage crops affects methane (CH₄) production. Compaction reduces soil porosity, which can decrease methane oxidation and increase emissions into the atmosphere.

Furthermore, it affects plant growth, influencing CH₄ production in the rumen of the animals that consume these plants.

Solution with MULTIARADO

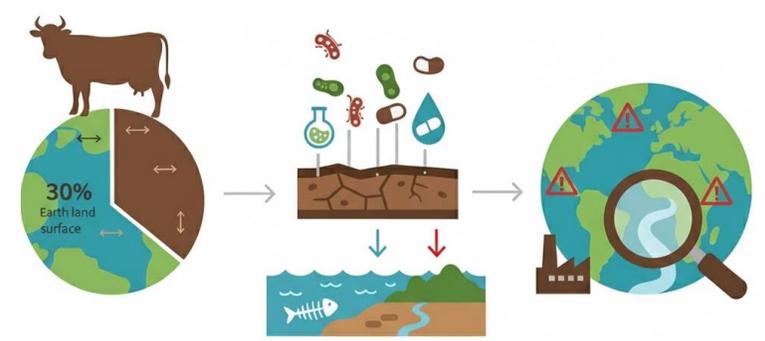
An innovative technology for the regeneration of livestock soils and pastures, without the need for traditional tillage and without disturbing the topsoil layer.



↓ Main Soil Degradation Problems in Grasslands ↓

Livestock farming: A dominant environmental actor

Main Soil Degradation Problems



Soil erosion: Overgrazing and lack of vegetation cover leave the soil exposed to wind and water, causing the loss of fertile topsoil.

Soil compaction: The constant movement of animals and heavy machinery compresses the soil, hindering water infiltration and plant root growth.

Soil contamination: Livestock waste can contaminate the soil and nearby water sources (posing a risk to human health).

Desertification: In some cases, degradation can lead to desertification, where the land loses its productive capacity and becomes barren.

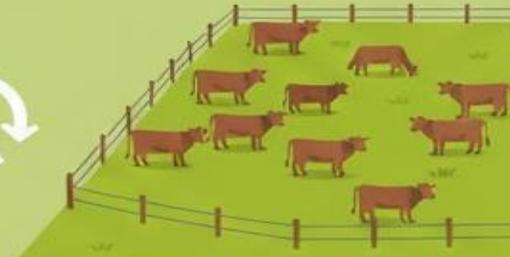
Impact on biodiversity: Soil degradation reduces the biological diversity of local ecosystems.

Other factors: salinization, acidification, and chemical contamination.



Current Mitigation Strategies

**PROPER
GRAZING
MANAGEMENT:**



**AVOID OVERGRAZING
AND ROTATIONAL
GRAZING.**

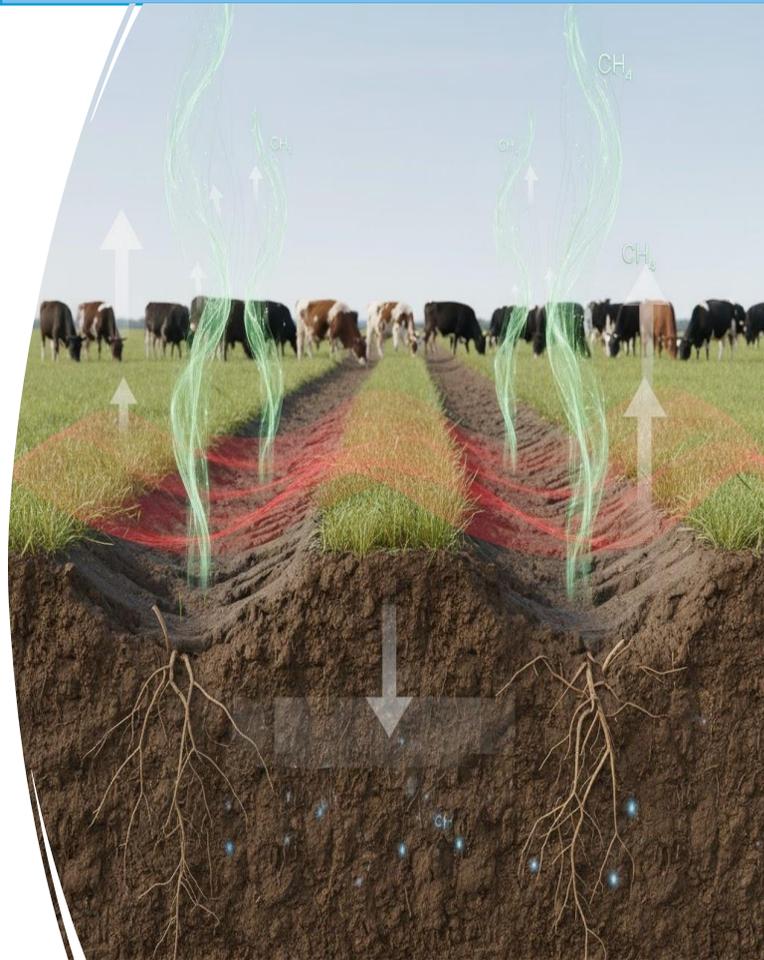
**SOIL DECOMPACTION:
TECHNIQUES SUCH AS
HORIZONTAL TILLAGE AND THE
INTRODUCTION OF ORGANIC
MATTER**



**Improving forage quality:
Choosing more digestible grasses
and forages**



**Use of methane inhibitors:
Research on feed additives for
animal nutrition.**



Benefits of the Multiplow in Livestock Farming and Pastures

The Multiplow, with its horizontal cutting system, offers a number of significant advantages for livestock farming and pasture management, contributing to soil health and the sustainability of production systems.

Increased forage production: Healthier, more aerated soil promotes vigorous pasture growth, increasing forage yield.

Improved forage quality: Pastures grown in soils tilled with a multi-plow typically have a higher nutrient content and are more palatable to livestock.

Greater drought resistance: By improving the soil's water retention capacity, pastures become more resistant to periods of drought.

Greater weight gain: A diet rich in high-quality forage, grown in healthy soils, contributes to greater growth and weight gain in livestock.

Improved animal health: Animals that feed on high-quality pastures tend to have better health and a lower incidence of disease.

Reduced costs: By improving the efficiency of production systems, multi-cropping can reduce feed and livestock management costs.



Sustainable Livestock THE WAY FORWARD

Sustainable soil management, assisted by decompaction technologies like the MULTIARADO, is crucial for mitigating the environmental impact of livestock farming, reducing CH₄ emissions, and ensuring the long-term productivity of pastures.

Investing in soil health is the foundation of a more environmentally friendly and climate-resilient **future for livestock farming.**

WHERE, HOW AND WHEN TO START WITH MULTIPLOW?



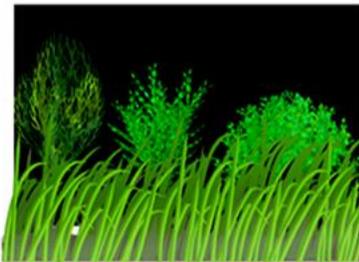
BEHIND THE HARVEST

ORCHARDS

CITRUS

FURROWS OR EDGES

GREENHOUSES



SHADE NETS

WEEDING AND MULCHING

WEED REMOVAL

TUBER HARVESTING

OIL PALM



← **SUGARCANE:**
CULTIVATION PRACTICES,
REMOVAL AND DISPOSAL OF STALKS,
COVERING THE SUGARCANE.



**BARE SOIL AFTER PASSING
OVER WITH HARROWS OR DISC PLOWS**



The MULTI-PLOW and its application in pastures and livestock farming. Fertile pastures, healthy and productive livestock through the use of the MULTI-PLOW.

Immediate Benefits

with the use of the MULTI-PLOW:

- Eliminates soil and pasture compaction.
- Reduces soil preparation work.
- Decompacts pasture soils without damaging the grass and without moving the animals from the area.
- Restores the physical, chemical, and biological conditions of the soil.



MULTIPLOW





PATENTS AND TRADEMARKS



TÍTULO DE PATENTE No. 420501

Titular(es): ALBERTO REGINO NODAL CERVANTES

Denominación: APARATO DE PREPARACIÓN DE SUELO EN ACTIVIDADES DE LABRANZA.

Clasificación: CIP: A01B13/08
CPC: A01B13/08

Inventor(es): ALBERTO REGINO NODAL CERVANTES

SOLICITUD

Número: MX/a/2020/009539 **Fecha de Presentación:** 07 de agosto de 2020 **Hora:** 14:43

Vigencia: Veinte años
Fecha de Vencimiento: 07 de agosto de 2040
Fecha de Expedición: 17 de diciembre de 2024

La patente de referencia se otorga con fundamento en los artículos 1º, 2º fracción V, 6º fracción III, y 59 de la Ley de la Propiedad Industrial.

De conformidad con el artículo 23 de la Ley de la Propiedad Industrial, la presente patente tiene una vigencia de veinte años improrrogables, contada a partir de la fecha de presentación de la solicitud y estará sujeta al pago de la tarifa para mantener vigentes los derechos.

Quien suscribe el presente título lo hace con fundamento en lo dispuesto por los artículos 5º fracción I, 9, 10 y 119 de la Ley Federal de Protección a la Propiedad Industrial, artículos 1º, 3º fracción V, inciso a), 4º y 12º fracciones I y III del Reglamento del Instituto Mexicano de la Propiedad Industrial, artículos 1º, 3º, 4º, 5º fracción V, inciso a), 16 fracciones I y II y 30 del Estatuto Orgánico del Instituto Mexicano de la Propiedad Industrial, 1º, 3º y 5º fracción I Acuerdo Delegatorio de Facultades del Instituto Mexicano de la Propiedad Industrial.

El presente documento electrónico ha sido firmado mediante el uso de la firma electrónica avanzada por el servidor público competente, amparada por un certificado digital vigente a la fecha de su elaboración, y es válido de conformidad con lo dispuesto en los artículos 7 y 9 fracción I de la Ley de Firma Electrónica Avanzada y artículo 12 de su Reglamento. Su integridad y autenticidad, se podrá comprobar en www.gob.mx/impi.

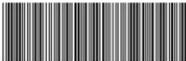
Asimismo, se emitió conforme lo previsto por los artículos 1º fracción III, 2º fracción VI, 37, 38 y 39 del Acuerdo por el que se establecen lineamientos en materia de Servicios Electrónicos del Instituto Mexicano de la Propiedad Industrial.

SUBDIRECTORA DIVISIONAL DE EXAMEN DE FONDO DE PATENTES ÁREAS MECÁNICA, ELÉCTRICA Y DE DISEÑOS INDUSTRIALES Y MODELOS DE UTILIDAD

MARINA OLIMPIA CASTRO ALVEAR

Cadena Original:
MARINA OLIMPIA CASTRO ALVEAR[00001000000510739631]SERVICIO DE ADMINISTRACION TRIBUTARIA[1987]MX/2025/7528[MX/a/2020/009539][Título de patente normal][2000]EGMGP[Page]1jcfS+TjwalupKwLGL1eS6Afxg=

Sello Digital:
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MX/2025/7528

MARCA REGISTRADA TM



Datos generales

Denominación	LA MARIPOSA DE HIERRO
Número de expediente	2363491
Número de registro	2139483
Fecha de presentación	13/7/2020
Fecha de publicación de la solicitud	20/07/2020
Fecha de concesión	15/09/2020
Fecha de terminación	13/07/2030
Tipo de Solicitud	REGISTRO DE MARCA

Código de Viena
27.05.05

Información del titular

Nombre	ALBERTO REGINO NODAL CERVANTES
Dirección	ARECA I NUM. EXT. 5123, LAS PALMAS PREMIER
País	MEXICO

Productos y Servicios

Clase	Descripción
7	ARADOS (INSTRUMENTOS AGRÍCOLAS ARRASTRADOS POR TRACTORES).

Trámite

Imagen	Folio de entrada del trámite	Año de recepción	Descripción	Fecha de inicio	Fecha de conclusión
	95736	2020	SOLICITUD DE REGISTRO	13/07/2020	



Ing. Pedro Pablo Rivero Hayes.

Chief Executive Officer of Eco IronButterfly. LLC

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El Salvador

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Alberto R. Nodal

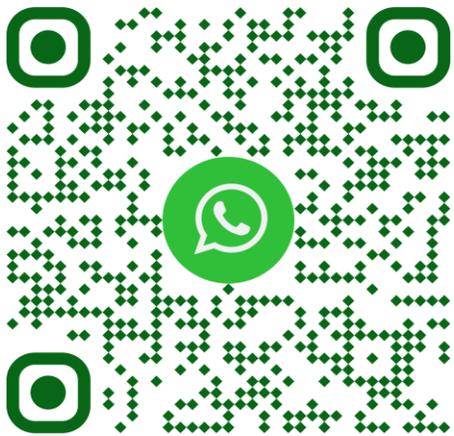
Owner and Founder of Eco Iron Butterfly. LLC

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Miami, Florida. USA



WhatsApp



Website



YouTube



PARA MAYOR INFORMACIÓN
EN ESPAÑOL:

Recuperación de la Inversión:

<https://multiplow.org/comparaciones>

Ganadería y Pastos:

<https://multiplow.org/ganaderia-y-pastos>

NUESTROS PRODUCTOS:

<https://multiplow.org/tienda>

Tecnologías Integradas:

<https://multiplow.org/tecnologias-integradas>

Fundamento Científico:

<https://multiplow.org/fundamento-cientifico>



<https://www.youtube.com/@multiplow>



FOR ENGLISH:



<https://ecoplough.org/>



CONTACTO – COTIZACIÓN:

<https://wa.me/message/VU4MAGEUGKI4N1>

