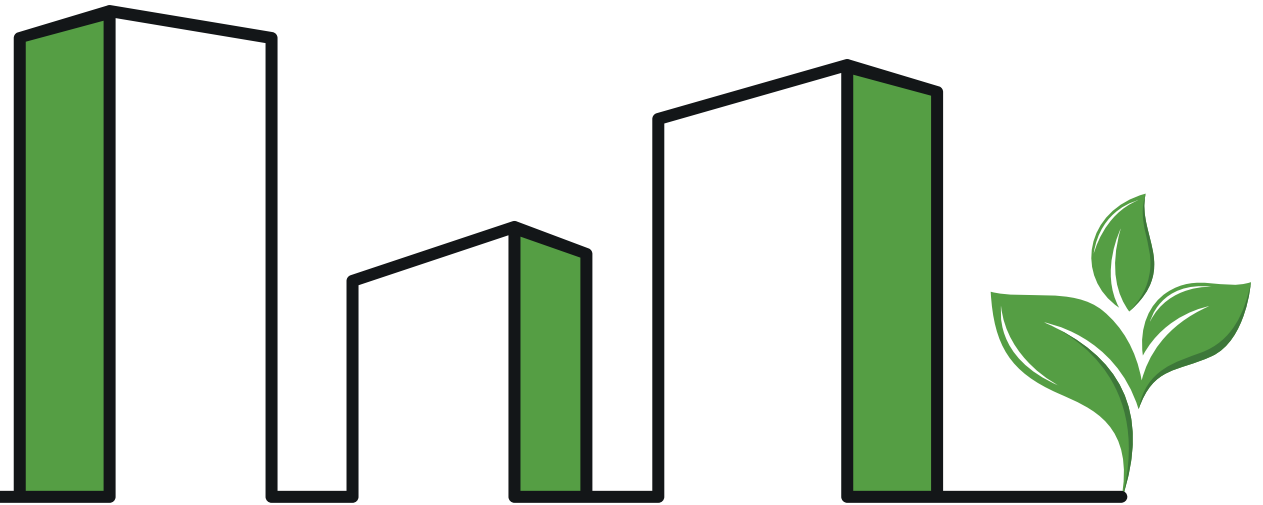


**VOLCANIC SOIL**



**WATAD** AGRO

**FOSTERING NATURAL ABUNDANCE**



2019 »



Specialized company founded for the exploration of basalt ores in the Al-Halabat Al-Azraq region.



Specialized logistics company for air, sea, and land freight to support the activities and expansion of the group.



Company specialized in marketing basalt, silica, and stones and processing them to cater to various industries.



A real estate development company that manages real estate portfolios for both global and local companies, as well as investors.

2020



The largest and the most modern volcanic soil company in Jordan and Middle East, which has the latest production line equipment factory in Al-Mafraq area in Jordan.

2023



WATAD Transport. Specializing in a spectrum of transport services in Jordan.

2024



Leading producer and supplier of the highest quality of silica products.

## OUR BRANCHES :



Opening of 3 branches in the Middle East:

- WATAD INTERNATIONAL – Doha, Qatar
  - WATAD GREEN – Riyadh, KSA
  - WATAD MINNING – Dubai, UAE



# ABOUT WATAD GROUP

Since our founding in 2019, we have evolved from a family business operating in Mining to one of Jordan's largest companies. Today, the group owns multiple companies, quarries, and factories. With covering all aspects from mining, agriculture, transporting, manufacturing and trading, real estate, and shipping.

WATAD Group is producing and exporting high quality to almost 20 different countries. Our Greatest aim always has been to maximize and maintain esteemed clients' 100% satisfaction.



## OUR GOAL

To maximize and maintain satisfaction of our respectable customers.



## AMBITION 2030

To become the world benchmark for the sectors and services we provide.

With advanced organizational structure and high-level of technology, WATAD supplies high-quality and unique services to its clients all over the world. Our customers benefit from our export quality record that meets global standards.

# WATAD

[www.watadjo.com](http://www.watadjo.com)







**April 16th, 2024**

**WATAD was honored by His Majesty King Abdullah II bin Al-Hussein with the Silver Jubilee Medal in view of what we offer to our beloved country, Jordan.**

**“Our Society deserves the  
best services and the  
highest quality products”**



**King Abdullah II Awarding  
Chairman "Mohannad Al Manaseer"  
Silver Jubilee for Agricultural Development**

بسم الله الرحمن الرحيم

عبدالله الثاني



نحن بنعمة الله جبر الله الثاني ابن الحسين ملك المملكة الأردنية الهاشمية

تقديرًا للدور الريادي الذي تقوم به شركتكم وند الزراعة، ولما عرفنا في الثمانين على  
إدارتها والعاملين فيها من إخلاص لنا، وولاء لبيتنا الهاشمي، ولانتماء للوطن العزيز، ولدورها  
في قطاع الاسمدة الزراعية وإنتاج التربة الزراعية البديلة فلاس الجودة العالية، وبمناسبة  
استقلال مملكتنا الزاهرة باليوبيل الفضي لتعلمنا سلطاتنا الدستورية وجلوسنا على العرش  
فقد أنعمنا عليها بميدالية اليوبيل الفضي، وأمرنا بإصدار هذه البراءة من يدينا الملكي  
الهاشمي إيزانا بركات.

صدر عن قصرنا بسماك الزاهر في حماك في اليوم العاشر من شهر شوال سنة  
الخمسة وأربعين وخمسة وأربعين هجرية الموافق لليوم العاشر من شهر نيسان سنة  
الفين وأربع وخمسين ميلادية.

بأمر جلالة مولاي الملك المعظم

رئيس الديوان الملكي الهاشمي









**FORSTERING NATURAL ABUNADANCE**

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**WE  
GUARANTEE**





## VISION

Spearheading commercial and industrial farming practices in the world.

Establishing and empowering farmers amongst youths and young adults.



## MISSION



## CORE VALUES

Create Value,  
Deliver value and  
collect, value.

# WATAD





With the determination of the Jordanian youth, another company has been established to join WATAD Investment Companies. The new company mines various sizes of zeolite and zeolitic tuff and imports such stones as lava stones. Particularly the factory established in collaboration with Al-Haq association in Al-Khaldyah, Al-Mafraq.

We invest in advanced technologies for the processing of volcanic soils that will increase our capacity to control the quality of our products. We strive to produce soils that will perform exactly as desired according to the crop for which they were designed. Our soils are engineered for any geographic region and weather conditions. Moreover, WATAD Volcanic Soil aims to:

- Grow the desert.
- Enable efficient use of water.
- Efficient use of nutrients and reduce pesticides application.
- Optimize and maximize crop production.
- Minimize rural degradation and pollution.
- Use soil with free soil-borne pathogens.



# OUR MINE

WATAD Agro Company owns the largest Quarry in the Middle East for zeolite, pozzolana and zeolitic tuff, with a total area of more than one million square meters, The Quarry is located in Al Safawi - Jordan.

This Quarry is known for the huge quantities and the high quality of the products, it is equipped with all the required production lines for mining, crushing and grinding while considering all occupational safety requirements.









# OUR FACTORY

Our production and packaging facility has been designed to ensure the highest quality with the ability to satisfy each and every customer need.

Our skilled workers specialize in utilizing volcanic soil to create exceptional products. With their expertise, they harness the unique properties of volcanic soil to craft high-quality goods that stand out in the market.





# Production

- The capacity of production: Exceeds 2000 ton per day.
- Buster Coir: Raw material preparation for the mixture.
- Stage of mixture: Combine raw materials for packaging.

# Packaging

Materials are packed on wooden pallets to be ready for shipping as per the following alternatives :

- 2, 5 and 10 Kg bags.
- 25 liter slabs.
- Jumbo Bag : packaging of large weights from 1 ton to 1.5 tons.
- Bulk packaging.
- As per client request.





# OUR R&D CENTER

WATAD Agro Research and Development Center serves as a dynamic hub for innovation and advancement in the field of agricultural solutions using volcanic stones. At the heart of our mission is the relentless pursuit of creating cutting-edge products and refining existing ones to optimize plant growth and enhance agricultural productivity.

Our dedicated team of researchers collaborates on a range of experiments, applying the latest technologies and methodologies to develop novel products.





## **QUALITY ASSURANCE -QUALITY CONTROL**

Our laboratory serves as the beating heart of innovation and quality assurance. Staffed with dedicated experts, our state-of-the-art facility is equipped with cutting-edge technology to conduct rigorous testing and analysis at every stage of production.

From scrutinizing raw materials for purity and consistency to conducting rigorous tests on prototypes and finished goods, our dedicated team in the laboratory leaves no stone unturned in guaranteeing the excellence of our products.

# OUR PRODUCTS

- Raw Materials (Zeolite, Zeolitic Tuff, Tuff, etc.) with various available sizes.
- WATAD Organic Volcanic Soil.





# Raw Materials

## Volcanoes and Volcanic Stones

Volcanic tuff is mined from natural resources. They are the product of explosive volcanism thousands of years ago during ejection and deposition on land and around the crater. The ash is totally or partly lithified into a solid stone. After a long time, it formed Zeolitic tuff/Pozzolana.

## The Benefits of Volcanic Stone

Fixed natural resource that keeps its structure and constituency for many years, approximately 20 years with no change.	Improve the physical and chemical features of the soil. Plants benefit greatly from their ability to retain moisture.	The high capacity of cation exchange will increase the soil's ability to retain water and cations.	Perfect environment to eliminate extra water from the soil to avoid waterlogging.
Creating a mediator to provide these elements to the plants slowly when necessary. An agricultural hydroponic environment consists of power, stability, and balance between water and air.	Size and constituent unit: depending on the zeolitic tuff environment, a light material weighs between 650 and 1050 kg/m <sup>3</sup> ; it can be soft, smooth, or rough.	It is a breakable and filterable material that can be tailored to agricultural needs in terms of size, color, and performance.	The usage is positively reflected on the expected costs of any agricultural project, no matter its size.

# ZEOLITE

Zeolites are microporous, crystalline aluminosilicate materials commonly used as commercial adsorbents and catalysts.

Applications have been developed in agriculture, in wastewater treatment, in gas separation or enrichment, in building construction, as catalysts, and in energy storage from solar collectors.

## **Some of the beneficial effects of using zeolites:**

- High speed in absorption of water, gases, and steaming (high evaporation).
- The filtration result strength of spaces forming high porosity and low density.
- The high-charge positive and exchange capacity of ions is three times that of clay minerals.
- Control the level of alkali in all state.
- Control the natural and chemical quantities of the biochemical dissolved oxygen.
- Increase the surface area of granular surface.
- Combining absorption and adsorption processes.
- Control the pH of the water inside the soil.
- Absorption of heavy metals from water and soil such as lead, iron, mercury, tin, and manganese.



# ZEOLITIC TUFF STONE

## Chemical Composition:

Oxide	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Na <sub>2</sub> O	K <sub>2</sub> O
Zeolitic Tuff	43.3%	13.3%	12.2%	10.9%	4.3%	4.2%	1.7%

0-4 MM



4-8 MM



8-16 MM



16-30 MM



OVERSIZE



# COCO PEAT



## Specifications:

Sieved: 6mm sieved

Electrical Conductivity:  $<0.6$  mS/cm

PH: 5.8 to 6.8

Moisture: 10% to 15% in dry blocks

Sand :  $<2\%$

Water holding capacity(%): 81 %

## The various application of coco peat are as follows

- Producers of growing media.
  - As a potting mix.
  - As a soil conditioner.
- Seedling nurseries/seed raising substrate.
- Golf constructors /sports field constructors.
- Lawns, nurseries & landscaping.







# WATAD ORGANIC VOLCANIC SOIL

**WATAD Volcanic Soil aims to** produce a wide range of growing media for advanced soilless culture systems, nursery suppliers, roof gardens, and landscape.

Our soil has been developed based on the results of our research in addition to research from national universities, national research centers, international peer-reviewed articles, and farmer needs.

This soil was built using special blends of zeolitic tuff, zeolite, and other organic and inorganic materials. Deep review of worldwide substrates guided us to produce pioneer products that are adapted for all kinds of advanced agricultural techniques.

## Our products are:

- Free of pests, diseases, and weeds.
- Retain a balanced percentage of water and air in their particles.
- Efficient use of chemical and organic fertilizers because they include zeolitic tuff, which has a high cation exchange capacity.



In addition, a wide range of volcanic soils are available for the production of vegetables and cut flowers in bedding and hydroponic system. Moreover, we have specialized lightweight volcanic soil for the roof garden. All products are valid to use for organic agriculture.

### General analysis range of WATAD Volcanic Soil:

Parameter	Value
Total Organic Carbon	22.5%
Salmonella	N/D
Arsenic	<20 µg/kg
Cadmium	<0.500 mg/kg
Chromium	10.710 mg/kg
Molybdenum	<0.500 mg/kg
Nickel	38.070 mg/kg
Calcium	16500.000 mg/kg
Magnesium	13950.000 mg/kg
Zinc	19.810 mg/kg
Mercury	<0.100 µg/kg
Total Nitrogen as TKN, %	1.42 %
Copper	17.21 mg/kg
Lead (Pb)	<0.500 %
Lithium	2.331 mg/kg

Analysis	Value
Carbon Nitrogen Ratio (C : N Ratio)	1:16
Moisture Content	19.1 %
Organic Matter by Loss on Ignition @ 550 °C	38.6 %
Electrical Conductivity (1:5 Water/Soil Extract)	4.8 dS/m
pH Value @ 25 °C (1:5 Water/Soil Extract)	6.8
Sodium Chloride	0.01 %
Soluble Sodium	<0.01 %
Sulfur	1816.000 mg/kg
Potassium K	0.20 %
Potassium oxide K2O	0.25 %
Total Organic Nitrogen	1.4 mg/L
Total Coliforms	6.8 MPN/g
Escherichia coli	<1.8 MPN/g
Phosphorous Pentoxide (P2O5)	0.06 %
Selenium	<20.00 µg/kg



# WATAD Volcanic Soil Benefits

Improves  
plant growth



Regulates The  
pH of the soil &  
reduce salinity



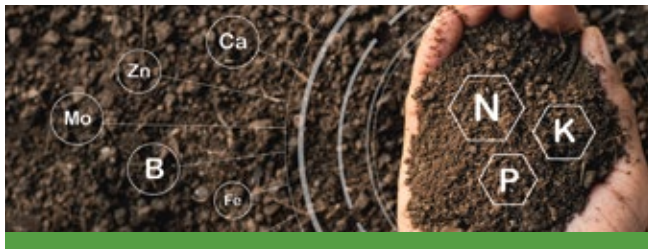
For year-round  
use



Diseases &  
weeds free



Provide the  
plant with all  
nutrients



Fully  
ecological



Saves water  
& retain  
moisture



Strengthen  
plant roots  
& prevent  
root rot



Improve the  
absorption  
of ant new  
elements



Increase  
soil aeration

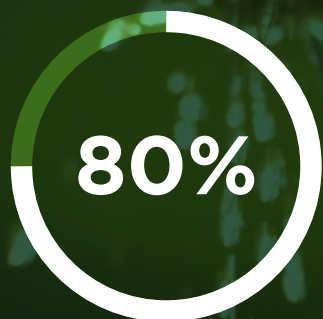





# WATAD Volcanic Soil Saves



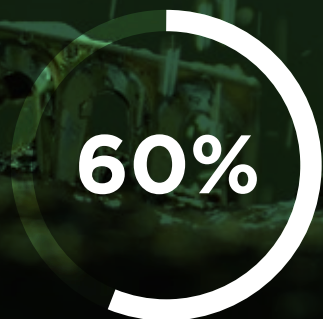
....  
**Salt  
Controller**



  
**Electricity**




....  
  
**Fertilizer**



  
**Water**







We have a wide range  
of specialized volcanic  
soils to match the  
plant's needs and  
production conditions.

**These products are**



# 1- Vegetables

Our specialized volcanic soil blends for thriving vegetable crops. These distinct formulations harness the rich volcanic minerals and unique characteristics of each soil type to create a perfect environment for vegetable cultivation. It is designed in several mixtures to meet the specific needs of each crop.

## Trade name:

- Flora-1, Flora-2, and Flora-3



## 2- Berries

Volcanic soil blends tailored for thriving berry crops. These unique formulations utilize the rich volcanic minerals and distinctive characteristics of each soil type, establishing an ideal environment for berry cultivation. Thoughtfully crafted in two distinct mixtures, these blends are fine-tuned to meet the specific needs of various berry crops, fostering optimal conditions for growth and harvest.

### Trade name:

For berries such as strawberries, blueberries, raspberries, and blackberries: Berry-1 and Berry-2







### 3- Roses & Woody Cut Flowers

our exclusive volcanic soil blend, expertly crafted for the exquisite cultivation of roses and woody cut flowers. This unique formulation taps into the richness of volcanic minerals and the distinct qualities of the soil to create an ideal setting for these blooms. Carefully concocted as a singular mixture, this blend caters specifically to the nuanced needs of roses and woody cut flowers, providing the perfect foundation for their growth, health, and vibrant blossoms.

#### Trade name:

For roses and woody cut flowers: Rose-1





## 4- Annual Plants

specialized volcanic soil blend, meticulously designed for the vibrant growth of annual plants. This unique formulation capitalizes on the diversity of volcanic minerals and the inherent qualities of the soil, establishing an optimal environment for the flourishing of annuals.

Crafted as a singular mixture, this blend is precisely calibrated to meet the distinctive needs of annual plants, ensuring an ideal foundation for their rapid and robust development throughout their lifecycle.

### Trade name:

Annual-1







## 5- Perennial Plants

Designed to support the enduring beauty of perennial plants. This distinctive formulation harnesses the richness of volcanic minerals and soil attributes, creating an ideal environment for the sustained growth of perennials.

Developed as a singular mixture, this blend is carefully tailored to meet the unique needs of perennial plants, ensuring a steadfast foundation for their long-lasting health and continual blossoming.

### Trade name:

For Woody plants: Perennial-1



## 6- Plant Propagation

For plant propagation and seedling trays. This specialized formulation capitalizes on the unique properties of volcanic minerals and soil composition, creating an ideal medium for the successful development of young plants.

### Trade name:

For seedling trays and plant propagation: Propagation-1





## 7- Roof Garden

Volcanic soil that is specialized for the roof gardens. It has a relative lightweight.

It has the ability to retain sufficient moisture for plants and has good drainage in the root zone. This media is available in a jumbo bag (1 m<sup>3</sup>).

- Roof garden Mix: Roofgarden-1.



## 8- Landscaping and lawns

Our volcanic soil blend, perfect for landscaping and lawns. This specialized mixture harnesses volcanic minerals for optimal plant growth. Carefully crafted for healthy root development, this singular blend enhances the vitality of your outdoor spaces. Elevate your landscaping and lawn care with our exclusive volcanic soil.

### Trade name:

Landscape-1







WATAD GROUP

WATAD  
AGRO

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