



## **PREMIUM BIOCHAR TURF BLEND #1**

Specially created for turf and golf courses applications

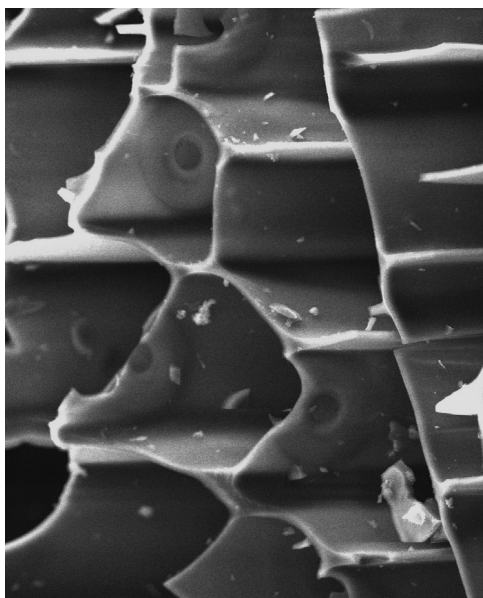


**Reduce costs and improves golfer experience:**

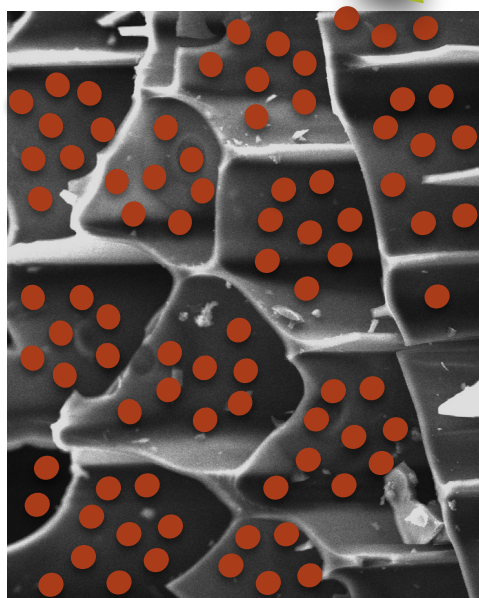
- **Up to 50% water savings**
- **Reduced fertilize/nutrients requirements**
- **One-time application**
- **Doubles grass density**
- **Costs offset by water/fertilizer savings**

## Biochar Now Using A 1200X Electron Microscope

Freshly made biochar

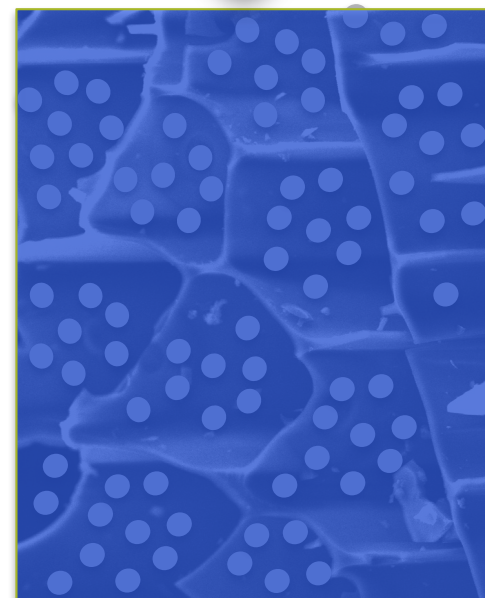


Attracts and  
holds  
nutrient  
molecules



BN's biochar attracts and holds nutrient molecules that become root available

Holds 5.6  
times its  
weight in  
water



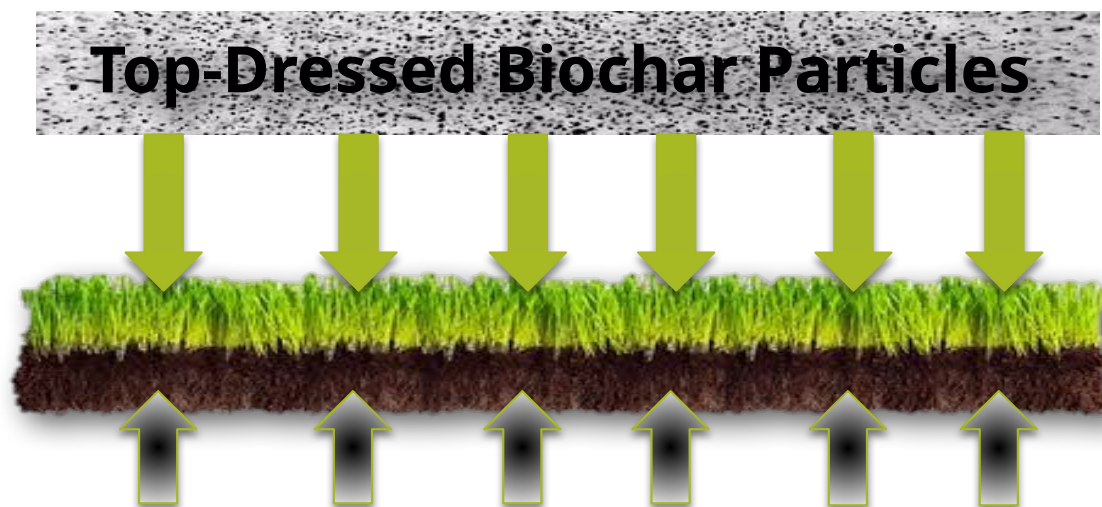
BN biochar also holds up to 5.6 times its weight in water that is root available with almost no evaporation

## Biochar Now Delivers

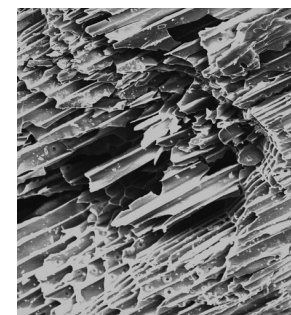
1. **50% water savings** – BN biochar stores water that's root available to lengthen the time between watering cycles. At one California course, the non-biochar course area required 3 waterings per week while the biochar test section only required one watering per week – a 67% water savings.
2. **Reduced nutrients** – in some cases, the reduction has been over 50%.
3. **One-time application** – BN biochar is very stable. It doesn't dissipate, evaporate or lose it's special properties of water and nutrient gathering.
4. **Doubles grass density** – lab tests from a very large lawn and landscape company showed a 110% biomass increase 90 days after applying BN biochar.
5. **Significantly increases a course's equity** – when a course's water costs are cut in half, the savings are typically reflected in the course's sale price.
6. **ORMI organic certification** – organic certification is now more important than ever. BN was the first biochar company to have OMRI certification and it has been kept current. Ask for a copy.
7. **17,000 year half-life** – a federal lab reviewed BN biochar and projected it's huge half-life.
8. **Paid from water savings** – water savings can typically pay for the cost of biochar.

## Applying BN Biochar

BN's biochar particles are **top-dressed** on the turf and then watered to help migration into the root zone. The particles then chamber their **craggy surfaces** in the root zone soil. After that, they will hold water while attracting and holding nutrient molecules for extended plant support.



BN biochar particles have craggy surfaces that chamber themselves in the root zone to store water and nutrients for plant support.



BN biochar particles have craggy surfaces.

## Proven Product

Biochar Now has been testing its biochar at independent labs for five years to determine its capabilities and how best to make it. Below is a summary table of nutrient removal from water where Phosphorus was removed at 99.8% and Nitrogen at 89.7%. This means that the company's biochar will attract and hold nutrients exceptionally well for turf and golf course applications and then make them root available throughout the season.

| <b>Ag Nutrients Removed from Dirty Water Solutions<br/>Using Biochar Now biochar<br/>Independent Test Results</b> |               |                          |                   |
|-------------------------------------------------------------------------------------------------------------------|---------------|--------------------------|-------------------|
|                                                                                                                   |               |                          |                   |
| <b>Nutrients</b>                                                                                                  |               | <b>Starting<br/>mg/L</b> | <b>% Adsorbed</b> |
| Phosphorus                                                                                                        | non-soluble P | 27                       | 99.9%             |
| Phosphorus                                                                                                        | P             | 27                       | 99.8%             |
| Phosphate                                                                                                         | PO4-P         | 284                      | 86.6%             |
| Ammonia                                                                                                           | N             | 1.1                      | 89.7%             |
| Nitrate                                                                                                           | NO3-N         | 52                       | 64.3%             |

**Water holding capacity = 5.6 x the weight of biochar**



## Proven Manufacturing

Biochar Now developed a patented, slow-pyrolysis technology to make consistent, high- quality biochar every time using company-designed kilns and computer control systems. Each kiln automatically adapts to nature's anomalies without human intervention. The kilns are approved and permitted to meet EPA clean air standards and at full strength, a manufacturing site can use 100s of kilns.

