



## Accelerating Dune Grass Growth with Kelpak Biostimulant

Grasses growing on sand dunes play a crucial role in maintaining the stability and ecological balance of coastal ecosystems and help preserve the stability of barrier islands by providing erosion control, sand stabilization and accumulation, water filtration, habitat creation and overall coastal resilience.

The three, primary species of dune grasses that do best on beaches are American beachgrass (*Ammophila breviligulata*), sea oats (*Uniola paniculata*), and bitter panicum (*Panicum amarum*). They are native to the coast and are excellent for dune stabilization due to the growth of deep roots and spreading to form extensive networks of rhizomes.

Warm-season plants such as the sea oats or bitter panicum can be fertilized at the time of planting. Cool-season plants like American beachgrass do better by broadcasting the fertilizer in spring and fall. Once well-established – sometimes taking as long as 2, to 3 years - fertilizing is generally unnecessary. Fortunately, there is a proven way to accelerate their growth, getting the plants established and spreading much more quickly.



**Kelpak Liquid Seaweed Concentrate** is a natural, organic, liquid biostimulant that is produced in South Africa by responsibly farming *Ecklonia maxima* kelp and processing it in a unique way that preserves the integrity of the natural nutrients and complex phytochemicals it contains.

It is not a fertilizer but may best be thought-of as a “plant I.V.”. Just as a football player may get a half-time transfusion of fluids, glucose, and electrolytes, enabling better second-half play, Kelpak gives the plant large doses of the same nutrients and phytochemicals it would produce for itself, but by not having to expend its own resources to produce them, it preserves them, allowing the plant to grow faster, better, and stronger.

Kelpak has been well studied, with its performance confirmed through university and field testing, time and time again. It has been used on foods, fruits, nuts, grains, ornamentals, turf, and landscaping plants for over four decades.

Kelpak can hasten the germination rate of seeds, accelerate the growth, spreading, and flowering of plants, and improve flower and fruit development and yields, all while being safe for the plants, the environment, and the user.

**Application** is best done through solution broadcast, whether that is by commercial irrigation trailers or for the homeowner, via a common hose-end sprayer, such as the Ortho Dial-and-Spray. Drenching is also acceptable.



The following regimen has proven to be successful, and may be employed as early as the time of planting:

- Using a 1:125 dilution (one ounce per gallon), spray the plants, thoroughly wetting the foliage and drenching the soil around the root system, if possible.
- Repeat two weeks later using a 1:250 dilution (one tablespoon per gallon), wetting the foliage.
- One month later spray the foliage with that same 1:250 solution. Monthly application may be repeated as you see fit.

The left side of this Oak Island, NC dune was treated using the recommended regimen starting the third week of January 2023. The image was taken four months later. The contrast to the untreated part of the dune is obvious.



These are images of American beachgrass plugs planted by a Topsail Beach NC homeowner in early April 2023 and again seven weeks later in May.



If you have questions, please feel free to contact us. Our goal is to be a resource to your growing efforts, not just a vendor.



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