



A New Innovative Use of Western Conifer Species- A Substitute For Peat Moss In Horticulture

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We know we need as many uses of excess forest biomass as possible to help clean out the forests for fire resilience. A new such use has emerged recently- processing excess conifer forest biomass into a substitute for peat moss for horticulture. The hort industry uses millions of tons of potting mix every year, and this is increasing year to year. Peat moss as a principal ingredient has numerous problems, so they are looking for substitutes. They've been processing conifer into a substitute for peat in Europe for 2 decades and one company on the US east coast for 10 years, but not yet in Western forests. The potential is for numerous facilities throughout Western forests producing the material for an expanding hort industry nationwide and possibly for export. Use of wood fiber substrate for potting mixes is expected to increase 10-fold in the coming decades.

So what does it take to do this? Specialized extruder machines are used to defiber conifer wood chips into a fibrous material similar to a cotton ball or steel wool. Then it's a matter of packaging, shipping and delivery. The extruders are expensive and they use a lot of power, so capitalization costs are in the millions and you need a cheap source of power. Proximity to feedstock and buyers are key to the economics.

Plumas Wood Fiber is a start-up company based in Quincy, Ca for the purpose of initiating this industry on the west coast. If successful, it will take feedstock from Plumas National Forest and surrounding areas, and sell to west coast horticulture. Many other similar operations could exist in other feedstock areas, serving local or distant horticulture. Each facility might process 10-40k tons of biomass each year, but the growing hort industry will need 100s of k tons to supply its needs in future.

Plumas Wood Fiber has conducted analytic research into Western wood species including P Pine with qualified academic researchers, and is currently working with 20 or so hort stakeholders doing growth trials with wood fiber substrate made solely from P Pine to validate it's usefulness, which the hort industry needs to see. Results, thus far are very good. P Pine makes a good horticultural substrate.

For more information visit www.plumaswoodfiber.com