

Growing media

The utilization of wood components in growing media (substrates) worldwide is not a new concept. What is new, is the current interest and product development that has occurred in Europe and North America in recent years.



Commercial operations producing different wood fiber substrate materials.

Wood components: a step towards a sustainable growing media

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Since its inception in the 1980s-90's, the use of wood fiber (or other wood components) has been a minor contributor as an alternative to the more traditional and accepted peat moss and pine bark materials.

Why gaining interest

There are now various reasons why wood components are gaining more interest than before. Some of the reasons include: 1) more governmental regulations on peat harvesting and use; 2) governmental subsidies and incentives for peat-free materials; 3) a broader societal/consumer focus on sustainability and preference for local products; 4) an economic opportunity to reduce raw material transport distance, weight, and cost; 5) a more com-

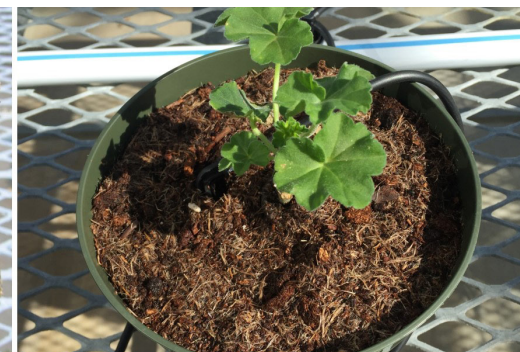
mon thought from industry officials and substrate manufacturers that they cannot rely entirely on a single component such as peat as its major raw material in the long term future; and 6) a growing body of scientific data on the successful utilization of wood components in growing media. With interest and opportunity comes the need for understanding the differences in these products/materials and an even greater need for a systematic understanding of how wood components are manufactured and used.

Variables

There are many ways to produce wood components, and there are even more factors that influence the consistency and reproducibility of those components during process-

ing. There are many types of machines that reduce trees/logs into smaller sizes: shredders, chippers, wood hogs, shavers, etc. There are also different techniques and machinery used to further reduce those smaller wood materials (feed-stock) into various types of wood components, including extruders, disc refiners, hammer-mills, knife ring flakers, etc.

No two types or methods will yield the exact same end-product. Regardless of the type of machine/machinery used, the variables that influence the engineering of the wood components have to be understood, accounted for, and minimized as much as possible. As with all things "Engineered" there are standards, protocols, and guidelines for how to successfully reproduce a consistent



Examples of plants grown in peat-based substrates containing 30-40% wood components.

by Arturo Croci

Safe sale in Italy

product. These principles also apply in the manufacturing of wood substrate materials.

Potential substrates/components

Many tree species and wood sources have been investigated over the years as potential substrates/components. The main species used to make commercial products are Pinus, Larix, and Picea. Factors that influence the usability of a particular tree species (or wood source) include availability, abundance of resource, other competing markets for the trees, toxicity of wood, rate of degradation and breakdown, grindability (ability to be easily processed/engineered), etc.

Wood materials can be sourced from freshly harvested whole trees, unused tree parts remaining after timber harvest, tree pruning waste, storm debris, etc. Wood materials should not come from commercial sources like construction debris, pressurized treated lumber, etc. as those materials can contain traces of heavy metals. Diseased or insect-infected timber should also be avoided as a source of wood/forest materials and instead be used for other potential purposes like biofuel generation.

Sourcing and acquisition of raw wood materials is important and must be monitored so that the quality of the produced wood fiber/components remain high. Other initiatives are also being considered by some substrate manufacturers to acquire land for the specific purpose of "growing their own substrate" by growing their own trees.

Wood is not wood, is not wood

Just as we know very well...peat is NOT peat, is NOT peat....we must also learn and appreciate that wood is NOT wood, is NOT wood! The range of peat materials, fractions, sizes, and ages is extremely diverse and these different peats are used in different ways. The same mindset is needed when working with wood components. It is important that any grower or other potential consumer/user of substrates composed of wood components, be knowledgeable about these new materials, and that they ask many questions of the manufacturer to assure they know how to best use the wood material in their production operation. The commercialization of wood substrate components will only increase in the near future, as will the need for more information about their utilization. Much work is being done on the scientific side to support this initiative! |||

A couple of days ago, a Dutch friend asked me how he could sell to Italian customers without losing money. My answer was that things are not easy for either party.

To understand why, let's have a quick look at the two major support systems available to the Dutch private sector. Dutch public law prescribes compulsory membership of the Chamber of Commerce. So far, nothing new. But until a few years ago Dutch flower and plant exporters were also forced to be members of the now-abolished Dutch Agricultural Wholesale Board, BGB. Under the BGB ruling exporters were required to report their exports on a daily basis with accompanying invoices.

What's more, they had to fill in a report detailing whether or not customers had paid. All this data formed the backbone of the BGB's overall accounts receivable system providing its members real-time insight into the financial health of their customers at home and abroad.

Dutch exporters had the opportunity to qualify customers and determine their ability to pay based on the BGB review and subsequently whether to deliver their products or insure their shipments.

Now that the BGB is gone the Dutch floral wholesale trade has to solve cash collection problems on its own. The only safe way is to insure goods, but apart from the cost that erodes profit margins, access to credit has been reduced because of too many delinquent customers.

The question arises why the credit of Italian importers is so low? First of all, floral wholesale businesses in Italy, for fiscal reasons, are under-capitalized. Almost all of them are capped at no more than €10,000. Secondly, high capital companies are mostly structured companies, but are often the least functional and indebted ones such as bankrupted Ciccolella and Floramiata. A third reason is that many structured Italian companies have a good share of capital and thus have credit. Lastly, exporters that continue to sell to problem buyers, are perfectly aware of the risk involved but take it for granted as goods can be insured. So they continue to bring large volumes onto the market which fuels the mechanism of low pricing.

So how on earth is it possible to distinguish the good from the bad? Some Dutch companies take the founding date of a company or the number of years the VAT number has been active as guidelines. Those parameters however are not a guarantee of the trustworthiness of a company. Yesterday a company was 'good', today this may no longer be the case. And those selling their plants and flowers without insuring them (which is expensive) take an awful lot of risk. In Italy, the tax rules will not change anytime soon so companies will continue to stay under-capitalized. If Dutch exporters are really wanting to do more business in Italy, they will have to change their procedures and that is not easy. They need to go the extra mile by getting to know their customers and the market. That said the internet is of little value. What exporters do need is a dense network of acquaintances and 'messengers' (most frequently transport companies are very well informed) and alertness.

Italy is not the worst market. Consider Great Britain, France, Spain, Greece and many Eastern European countries and even Germany where the business environment is not 'like it used to be'.

Every market has its peculiarities and its particular rules. No exporters, whether Dutch or Italian, or of any nationality for that matter can be so presumptuous as to dictate and subject their clients to their own rules.

Viva la vita

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