TALKING TIMBER

CHECKING YOUR IDs

Identifying what species a piece of wood is has become more important since the advent of the EU Timber Regulation. ***Gervais Sawyer*** *looks at the subject*

Wood industry consultant Gervais Sawyer FIMMM is editor of the International Wood Products Journal and also is active in wood industry schools outreach

As a wood man, I receive a steady stream of wood samples for identification, mainly from building surveyors. They want to know what species it is so that they can assess what strength class it could achieve. Similarly, when a failure of treated timber has occurred, knowledge of the species can give insight into whether the desired treatment could have been achieved. The most satisfactory job to date was for a celebrity who imported Brazilian craftsman made furniture. He had a dawn raid from HMRC who impounded his warehouse because somebody accused him of using an endangered species. After an intensive day's work, HMRC released everything, satisfied that the accusation was false.

Older wood people will remember flashing their x10 hand lens and being asked to settle a dispute over whether it was sapele or utile. They learnt this laboriously on their Institute of Wood Science evening classes/block release classes, or on their diploma/degree course in wood technology. However, the benefits of being able to identify wood always seemed rather remote. Now, however, things have changed.

In order to do this identification, for hardwoods a small block is nice, say a 15mm cube, but if a larger piece is submitted, it might reveal some figure or give a better idea of colour. Density is a useful guide too, so the larger the better please. Arm yourself with a x10 hand lens, a sharp chisel and a suitable key and you are away.

For softwoods, a much smaller piece is needed, say a 10mm cube, although I often work with 8mm diameter pieces taken with a carpenter's pellet cutter. After softening, thin sections are cut for viewing with a microscope. Again, the features are compared with identification keys.

Given that there are relatively few softwoods in commercial trade, this task is not very difficult. With hardwoods however the situation is much more difficult. There may be only a few dozen hardwoods commercially traded, but some of these are comprised of many different species grouped together under one marketing name e.g. meranti.

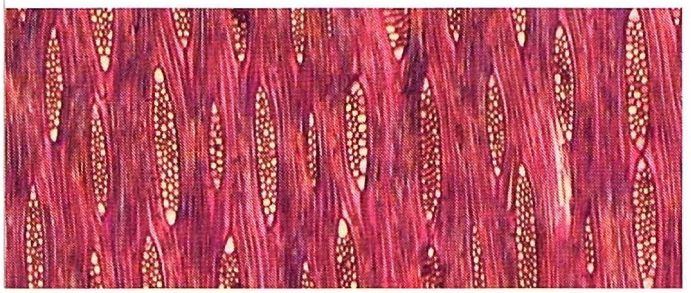
Trees can only be identified by examining the leaves, flowers and seeds, indeed that is how the botanist names them. To try and identify wood by the anatomical features of the wood is very limiting. Even the real experts, such as Kew, will often limit their identification to genus and not to species.

So, along comes the European Union Timber Regulation (EUTR) where buyers have to exercise due diligence that the wood was legally harvested in the first place and 'risk mitigation' measures put in place if there is a chance that it might not have been. Identification is very much a last resort if there is any doubt.

As a result, I receive pieces of wood and plywood with requests for identification and quite often it is almost impossible to help. For instance, there is a species of balau that is regarded as endangered, but there is no anatomical difference from the non-endangered species. Again, plywood comprises quite thin veneers. 3mm core veneers are bad enough but a 0.25mm face veneer? Be reasonable please.

This is traditional wood identification, but wood scientists are exploring other ways. DNA always sounds attractive and the cost is certainly coming down, but mature heartwood has very little DNA available for analysis. Other techniques are being tried such as near field Infra Red Spectroscopy and explorations using micro CT scanning.

Finally, there is no escaping that wood anatomy can be very beautiful and provides inspiration for many designers. Just look at the images below. ■



Below: Micro CT scan of copper treated pine
PHOTO: PHIL EVANS

Bottom: Mahogany
PHOTO: G SAWYER