

# Sustainability, reliability and efficacy: essential considerations when sourcing natural raw substances

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The demand for naturally-sourced alternatives to synthetic insect repellents is at an all time high. The desire to “buy natural” is now a major factor for consumers when buying insect repellent. This, coupled with the fact that people are opting for outdoor activities, such as camping, hiking and sports for health and recreational purposes – all of which have spiked due to COVID-19 – is driving the demand for insect repellents.

The public’s awareness of diseases transmitted by insect bites is also increasing, putting the insect repellent marketing on a high growth trajectory. There are three effective synthetic insect repellents for consumers to choose from, but only one effective naturally sourced repellent, which is an active substance derived from the oil of Eucalyptus Citriodora trees; a natural and renewable resource grown in several parts of the world.

Citrefine International Ltd is has over 25 years’ experience of sourcing Eucalyptus Citriodora oil. Through a simple conversion process we turn Eucalyptus Citriodora oil into the active ingredient Citriodiol®, which we supply to insect repellent manufacturers across the world.

We have supplied Citriodiol® to some of our largest customers for over 20 years. These long-term relationships are built on trust and stem from our continued focus on sustainability, stability and efficacy; essential considerations when working with natural raw ingredients.

## Stability of supply

Successfully sourcing raw materials is dependent on many factors. We know that the reliable supply of active ingredients such as Citriodiol® is important to our customers to ensure that they are able to meet consumer demand for their products. To address this, we have developed a robust and long-standing supply chain where we work closely with a number of different plantation owners and managers across the world to support the continuity of supply of Eucalyptus Citriodora oil.

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This stability of supply is further supported by the fact that the Eucalyptus Citriodora tree can be planted in a variety of locations around the world and, once established, it is a hardy tree where harvesting can take place whatever the weather conditions. In addition, Citriodiol® has a long shelf-life which enables us to hold, substantial stocks to ensure that we can meet all customer demands.

### **Sustainability and environmental benefits**

As part of the sustainable process of producing Eucalyptus citriodora oil, when the leaves are harvested for distillation, only a proportion of the leaves and twigs are removed, meaning that established trees can continue to absorb carbon and help protect the environment. In addition, we ship all raw materials and the vast majority of Citriodiol® by sea, rather than by air, and work with manufacturers who are certified under ISO9001 and abide by the principles of green chemistry to ensure quality management for customers' peace of mind.

### **Ensuring efficacy**

We have invested significant time and resource over the past 25 years to demonstrate that Citriodiol® has a better repellent efficacy than other natural repellents and is as effective as synthetic alternatives.

On top of the need for stability of supply and trust in efficacy, manufacturers are also burdened with the complex challenge of registering products within the regulatory frameworks of specific countries. That is why we offer our customers access to essential data, along with support and guidance, including help with classification and labelling, throughout the registration process. This means that, for manufacturers entering the natural insect repellent for the first time, formulating with Citriodiol® saves time and money.

Taking all of the above into consideration, companies already manufacturing insect repellents with active natural substances, or those looking to enter this space, should look to use tried and tested brands, like Citriodiol®, and work with trusted suppliers, like Citrefine, in order to capitalise on the booming demand for naturally sourced products.

