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## A new marker system for neem oil

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**Statement of the Problem:** Neem oil contains more than 100 biologically active compounds (limonoids). Azadirachtin as a marker for neem oil is well adopted in the biopesticide industry. However, this marker is insufficient to distinguish whether the neem oil is contaminated with other botanical oil because azadirachtin (A and B) represent only the polar and hydrophilic limonoids, very small portion of bioactive ingredients in neem oil.

**Methodology & Theoretical Orientation:** Terramera develop a finger-print HPLC method which can detect most bioactive ingredients in neem oil. According to the HPLC profile, a new marker system was developed in Terramera. This new marker system includes a wider spectrum of active ingredients and can protect from the adulterated neem oil because any foreign peaks can be easily detected under other limonoids region

**Conclusion & Significance:** The new marker system for neem oil provides a much better representation of the quality of neem oil than measuring azadirachtin alone.

## Biography

Caijun Zhang has built up his expertise in analytical chemistry support to pharmaceutical industrial for more than 20 years. He recently brings his knowledge to Terramera Inc, an agriculture biotech company and support the product development from prove- concept stage to the commercialization of finished product.

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