

5<sup>th</sup> International Conference and Exhibition on

# Pharmacology and Ethnopharmacology

March 23-25, 2017 Orlando, USA



## Berit Smestad Paulsen

*University of Oslo, Norway*

### Ethnopharmacological studies on wound healing plants in Mali and what did these investigations lead to?

Medicinal plants are the major source of drugs in most of the developing countries, and in Mali more than 80% of the population relies on these for the treatment of diseases. Over the years, surveys have been conducted in several regions of Mali, where the focus for some of the interviews were based on what plants were used against wounds of different types, both external and internal. In all cases, the healers were using water extracts in their treatments, and due to this it was of interest for us to study the compound being water-soluble, and especially the high molecular weight polysaccharides as they constituted the major part of the water extracts. During our interviews, we also found that water extracts were used against diseases like gastric ulcer, malaria and several other ailments, where we observed that the immune system might be involved. Thus, we have studied several plants for their content of polysaccharides with focus on their structures, their effects in immunologically related bioassays and also their structure activity relations. Most of the polysaccharides are of the pectin type with a backbone of the rhamnogalacturonan type I structure with arabinogalactan type I and II structures attached. Enzymatic degradation of the pectins gave rise to fragments that were the object for the determination of the most active parts of the structures. The presentation will include the description of the plants studied, their traditional uses as well as discussion on the structures and their importance for the biological effects observed.

### Biography

Berit Smestad Paulsen completed her PhD from University of London, UK, and returned to School of Pharmacy, University of Oslo, Norway, being the base for the rest of her career. She, for the major part of her research, focused on carbohydrates, especially the high molecular ones, and their biological importance. She has studied the importance of these compounds in medicinal plants from Mali, and also performed various ethnopharmacological studies in Mali. She has published more than 200 papers in reputed journals and has been serving as Editorial Board Member of various journals.

[b.s.paulsen@farmasi.uo.no](mailto:b.s.paulsen@farmasi.uo.no)

### Notes: