

Research Project

Surfactants of natural origin for the formulation and delivery of poorly water soluble drugs

Project funded by own resources

Project title Surfactants of natural origin for the formulation and delivery of poorly water soluble drugs

Principal Investigator(s) [Hamburger, Matthias](#) ; [Imanidis, Georgios](#) ;

Organisation / Research unit

Departement Pharmazeutische Wissenschaften / Pharmazeutische Biologie (Hamburger)

Project start 01.01.2011

Probable end 31.12.2012

Status Completed

Plants produce various primary and secondary metabolites with amphiphilic properties, such as phospholipids and saponins. Crude fractions/extracts containing such compounds are used extensively in food technology. However, the potential of natural surfactants in drug formulation is not exploited.

The project explores the potential of purified and defined mixtures of saponins derived from *Quillaia saponaria*, a food grade saponin source, for the formulation and delivery of poorly soluble drug substances. The saponins are characterized by HPLC and spectroscopic methods, and key physicochemical properties are determined to guide formulation studies. Lipid-based formulations are then developed on the basis of microemulsions, self emulsifying systems, and micellar aqueous systems.

Keywords Saponin, surfactant, formulation science

Financed by

Other funds

Add publication

Add documents

Specify cooperation partners

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
169724	Hamburger, Matthias	Imanidis Georgios	FHNW	01.01.2011	31.12.2012