

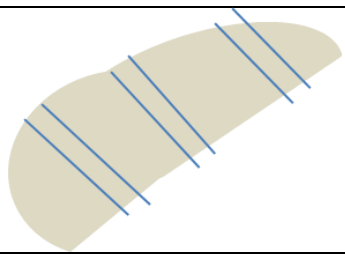


Extraction of flesh of pear fruits ('Abbé Fétel')

Sample preparation

<p>- dividing the fruits longitudinally in 8 sections</p>	
<p>- combining each second section (4 in total) to one mixed sample</p>	
<p>- deep-freezing in liquid nitrogen</p>	
<p>- lyophilization (freeze drying)</p> <p>- from each of the former 4 sections per fruit 3 further sections are prepared as shown in the figure resulting in 12 representative sections per fruit which are combined as the mixed sample for further extraction and analyses.</p>	
<p>The advantage of this procedure in comparison to the extraction of the whole fruit is the reduction of the plant material and the saving of solvents.</p>	

Extraction

Extraction of 1 g dry material by adding 5 mL methanol p.A. (MeOH p.A.) and 2 mL MeOH containing the internal standard flavone (0.1 mg/mL)

- weighed sample in a centrifugation tube
- add solvent incl. internal standard
- Homogenization with Ultra Turrax in a cooled water bath (+ice)
- rinse Ultra Turrax with MeOH
- Put the tube in the sonification water bath for 45 min.
- Centrifugation for 10 min. (4°C, ca. 4500 – 5000 U/min)
- transfer the supernatant in a round bottom flask
- evaporate to dryness using a vacuum evaporator
- redissolve the dry pellet in 2 mL MeOH
- transfer to a small test tube and store at –20 °C until further use

Preparation for HPLC

- centrifugation, then use 10 µL for HPLC analysis