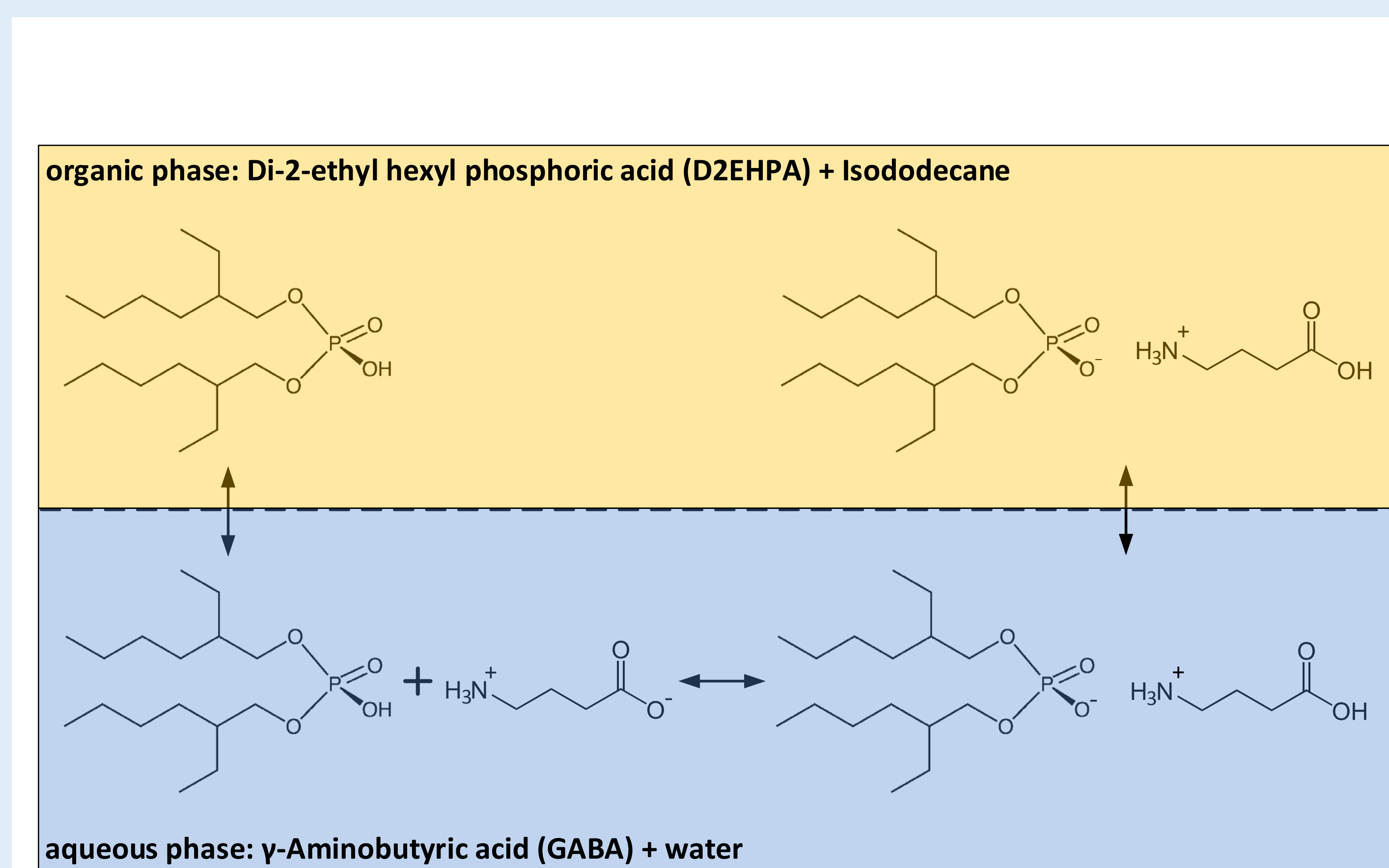


Reactive extraction for the recovery of amino acids produced by fermentation

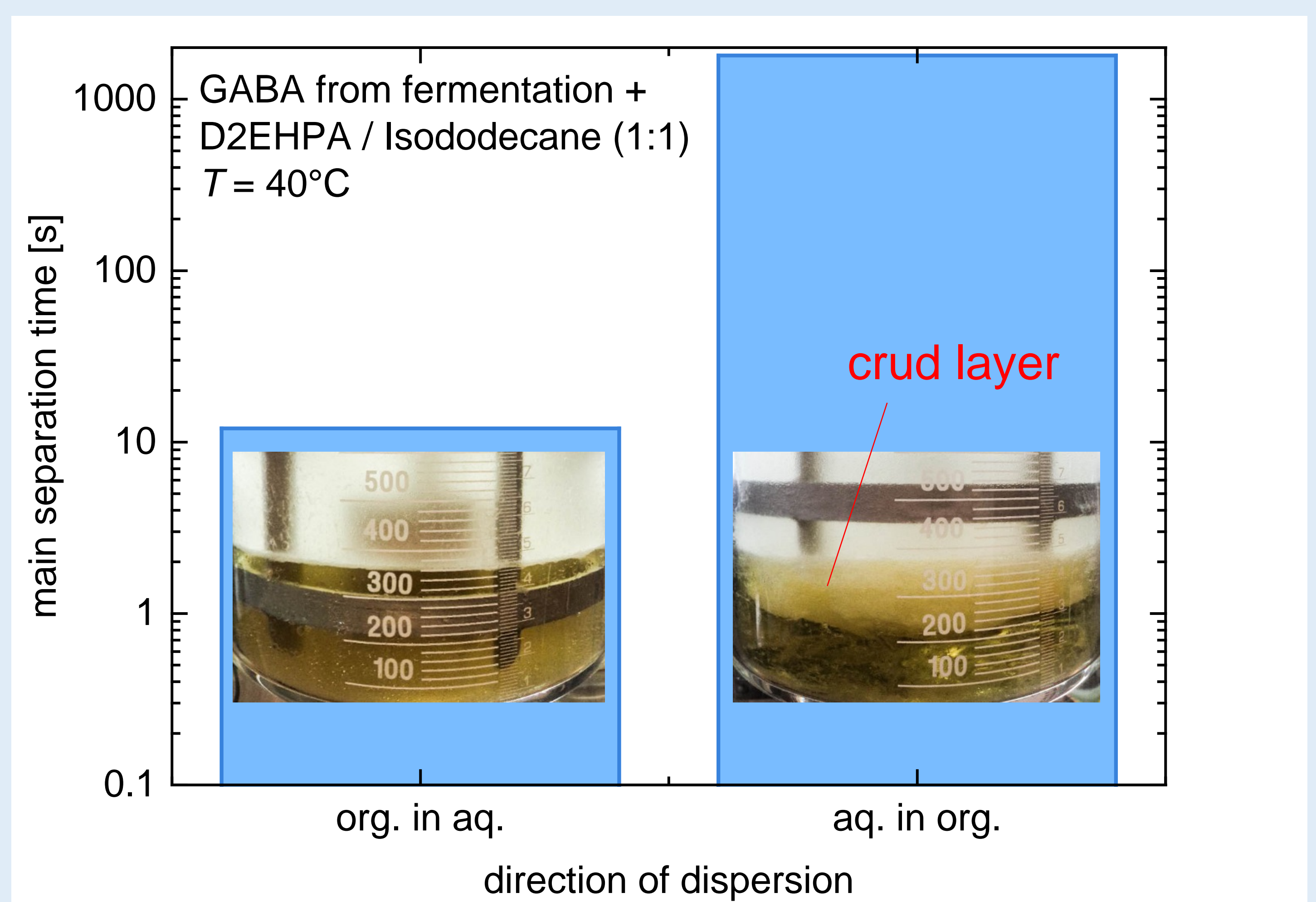
Florian Buchbender (BASF SE), Ruben Dewes (TU Kaiserslautern)

I. Reactive extraction principle for γ -Aminobutyric acid (GABA)



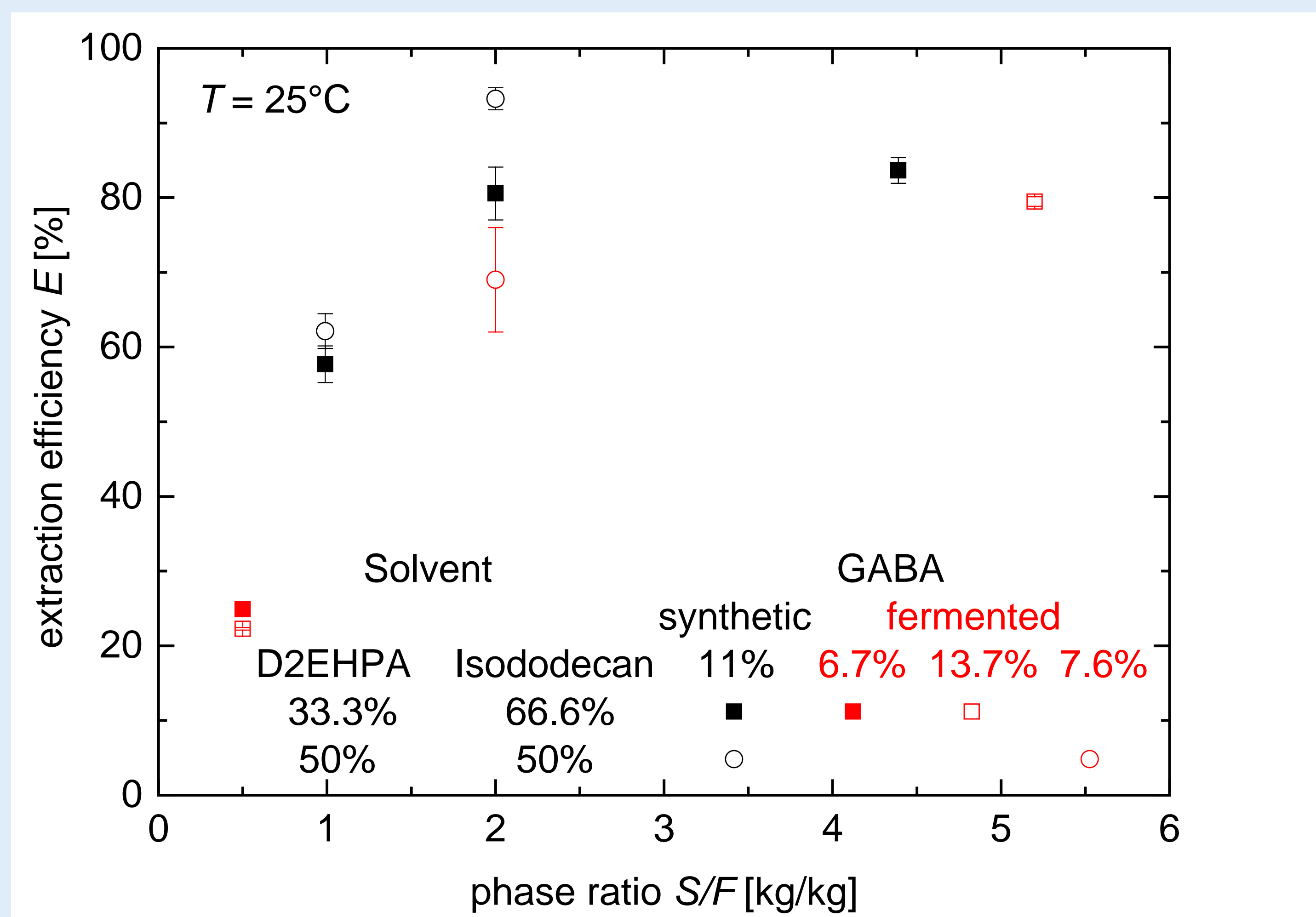
Acid-based extractant should be more acidic than acid group of amino acid

III. Phase separation behaviour with GABA from fermentation



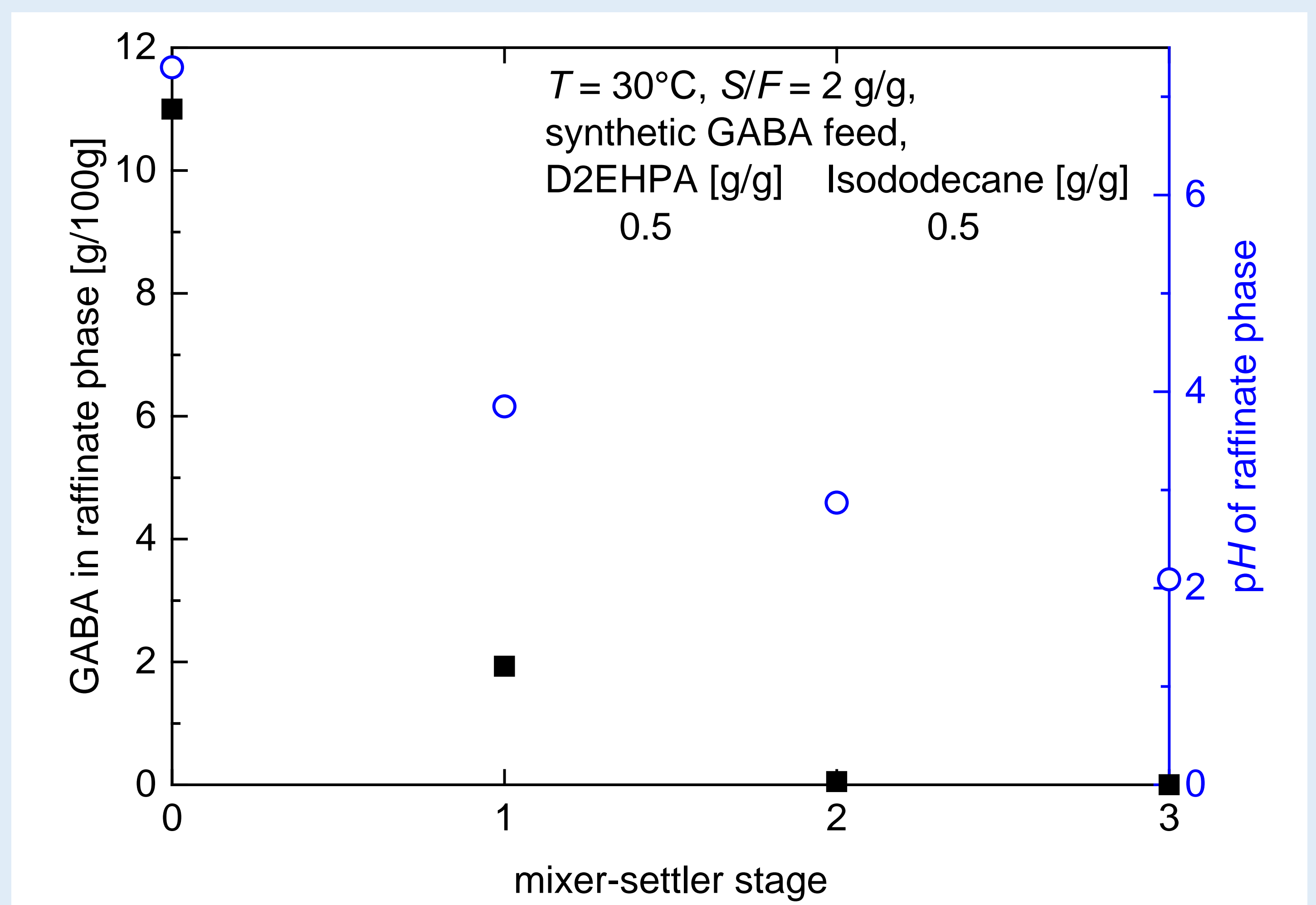
Direction of dispersion has strong impact on phase separation

II. Single-stage extraction efficiencies for different phase ratios



Negative impact of side components on E

IV. Multi-stage extraction of GABA using a mixer-settler



"Complete" GABA extraction after 2 stages

- Start date: 1st January 2015
- Duration 48 Months, until 31st December 2018
- Budget: 14 million €
- Project web site: www.spire2030.eu/prodias/