Aalborg Universitet



## Crystallization of artemisinin from chromatography fractions of Artemisia annua extract

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Published in: **Organic Process Research & Development** 

DOI (link to publication from Publisher): 10.1021/acs.oprd.5b00399

Publication date: 2016

Document Version Publisher's PDF, also known as Version of record

Link to publication from Aalborg University

Citation for published version (APA):

Malwade, C. R., Buchholz, H. K., Rong, B-G., Qu, H., Christensen, L. P., Lorenz, H., & Seidel-Morgenstern, A. (2016). Crystallization of artemisinin from chromatography fractions of *Artemisia annua* extract. *Organic Process Research & Development*, *20*(3), 646-652. https://doi.org/10.1021/acs.oprd.5b00399

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## **Supporting information**

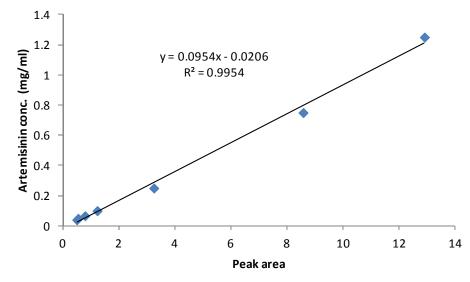


Figure S1. HPLC calibration curve for artemisinin obtained by using CAD signal.

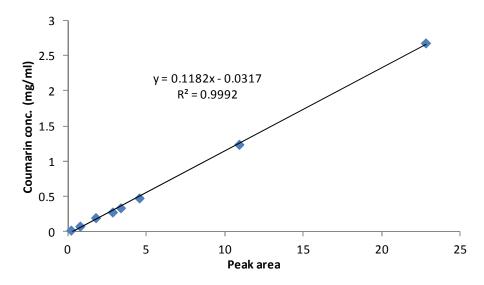
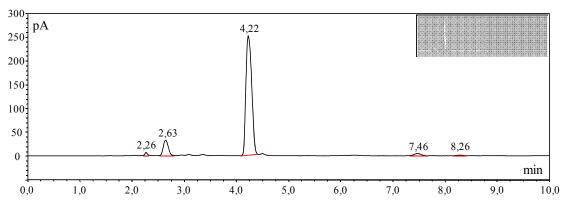


Figure S2. HPLC calibration curve for coumarin obtained by using signal at 200 nm.



**Figure S3.** Chromatogram (CAD) of the combined fraction. Arteannuin B (RT 2.26 min); Artemisitene (RT 2.63 min); Artemisinin (RT 4.22 min); Dihydroartemisinic acid (RT 7.46 min); Artemisinic acid (RT 8.26).

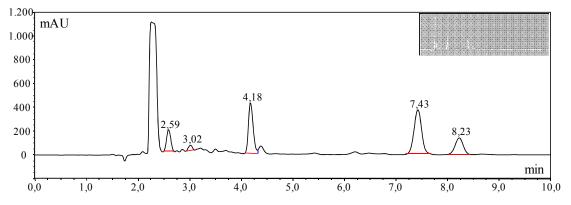


Figure S4. Chromatogram (UV 200 nm) of the combined fraction. Coumarin (RT 3.02 min).

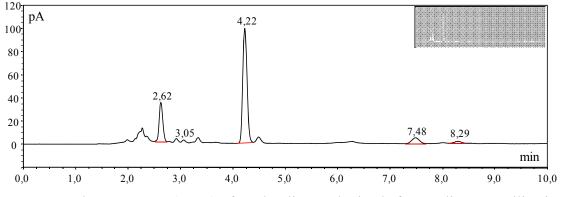


Figure S5. Chromatogram (CAD) of mother liquor obtained after cooling crystallization.

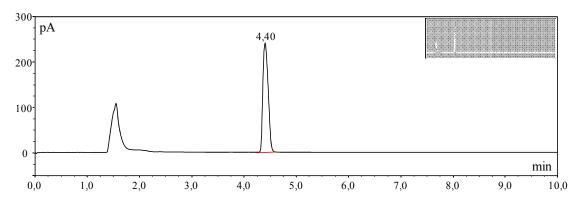


Figure S6. Chromatogram (CAD) of artemisinin crystals obtained after cooling crystallization.

Step	Volume of solution (ml)	Artemisinin concentration (mg/ml of solution)	Artemisinin in solution (mg)	Yield (%)
Combined fraction (1)	180	1.82	327.6	-
Evaporation (2)	18	17.81	320.58	-
Anti-solvent crystallization (3)	78	3.5	273	14.84
Cooling crystallization (4)	78	2.07	161.46	40.85
Overall yield (%)		49.63		

**Table S1.** Mass balance of artemisinin during crystallization process.