

ESI for

Natural Sporopollenin Microcapsules: Biological Evaluation and Application in Regulating Hepatic Toxicity of Diclofenac Sodium in Vivo

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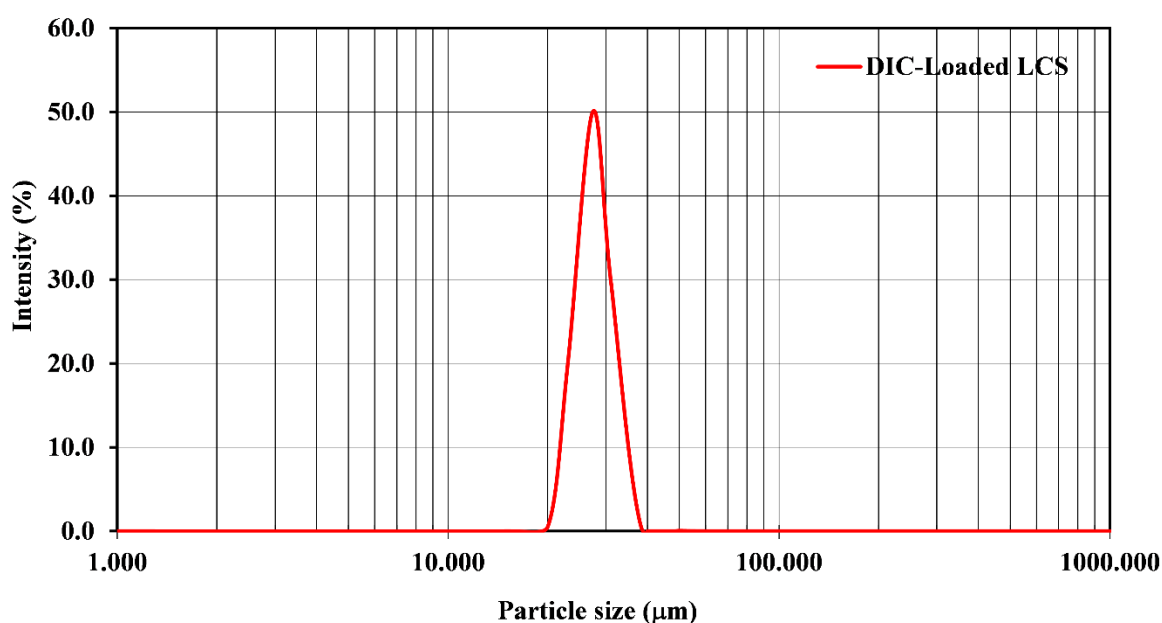


Figure S1. Size distribution of LCS microcapsules dispersed in water. The mean hydrodynamic diameter was $(27.62 \pm 0.87 \mu\text{m})$ measured using the Zetasizer Nano ZS (Malvern, UK).

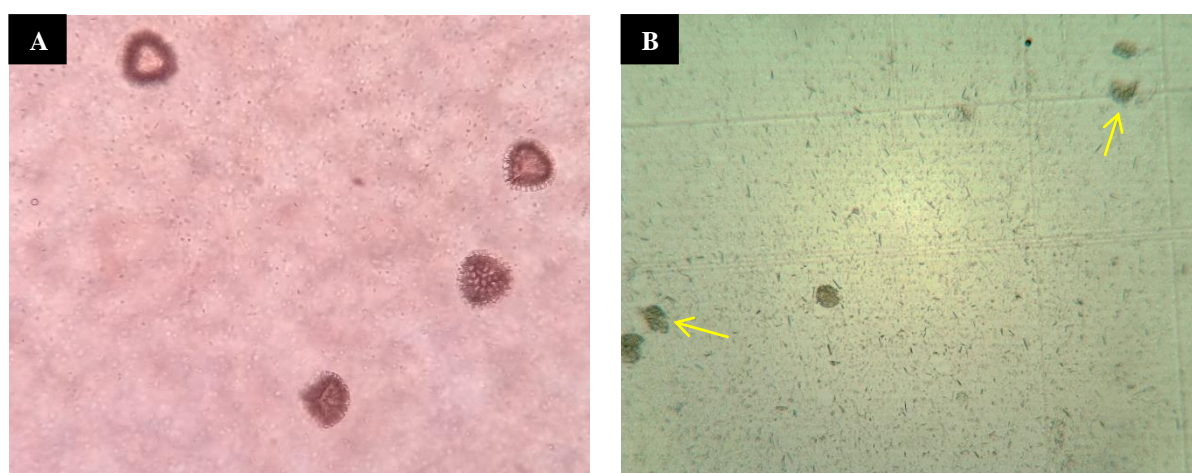


Figure S2. Optical microscopy images of LCS microcapsules detected in rat's blood after ingestion. A) Intact LCS 1 h. B) LCS 2 h, demonstrating some degradation (arrows).

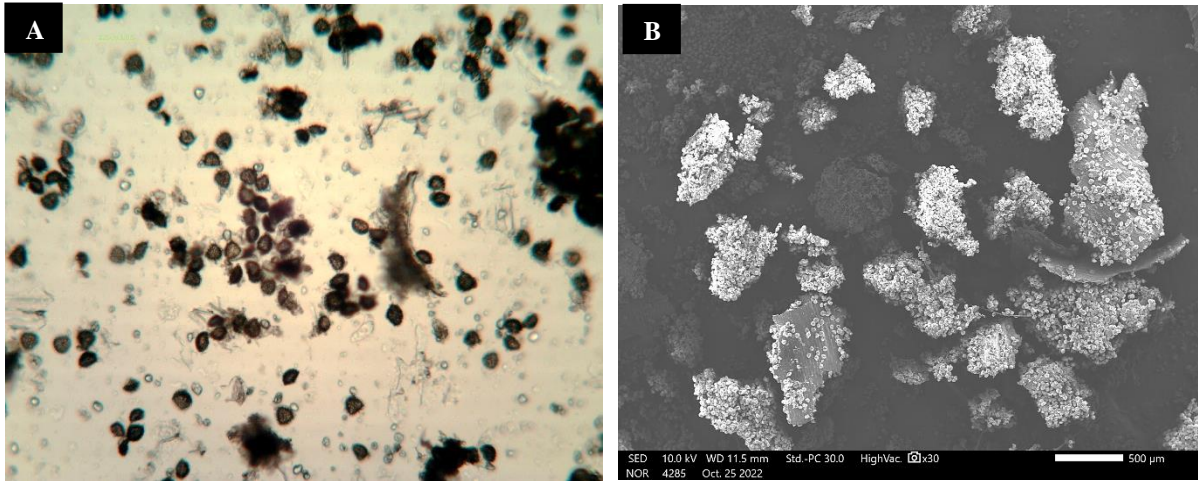


Figure S3. Intact LCS microcapsules found in rat's stomach fluid after 1h of oral ingestion. A) Optical and (B) SEM images.

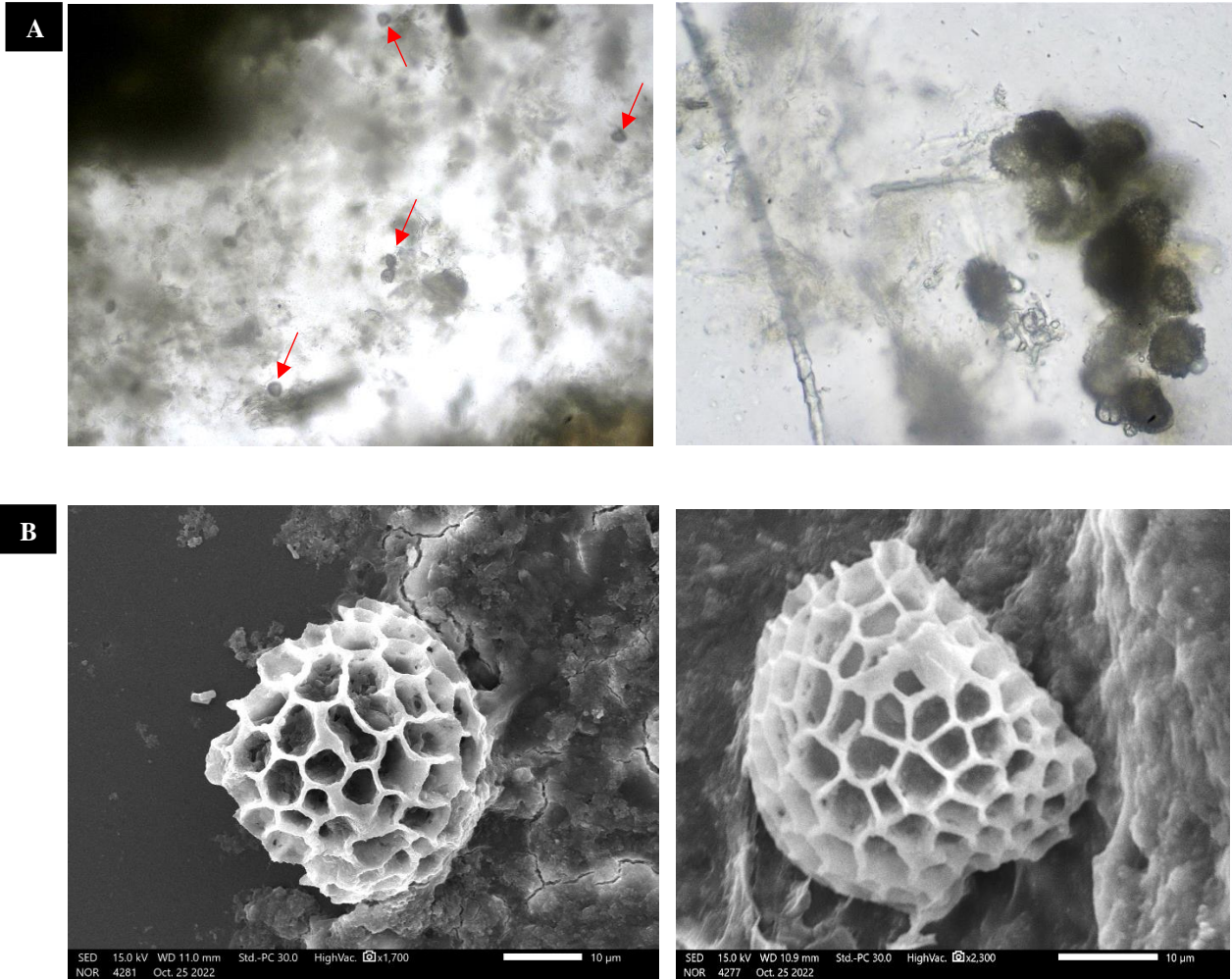
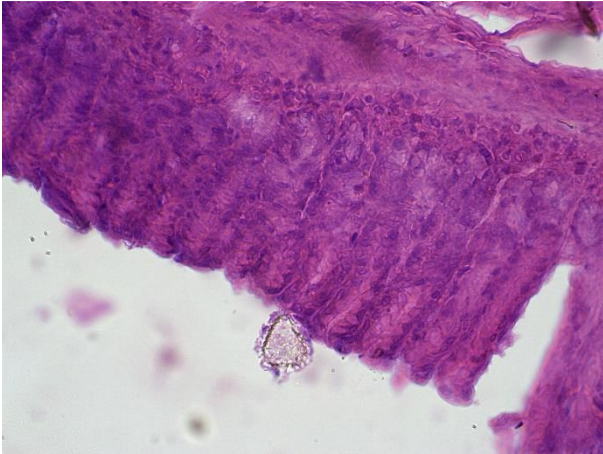
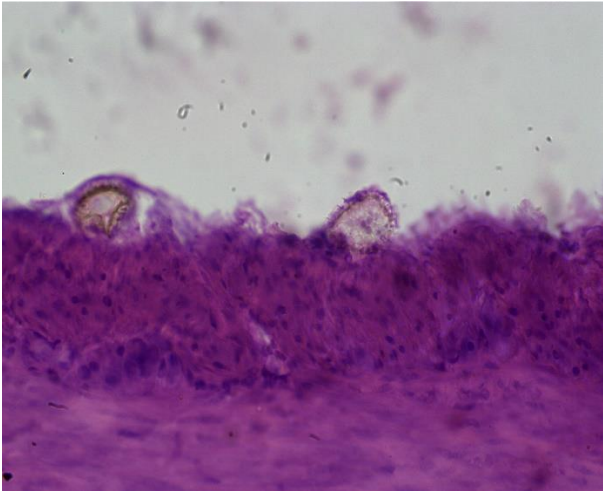
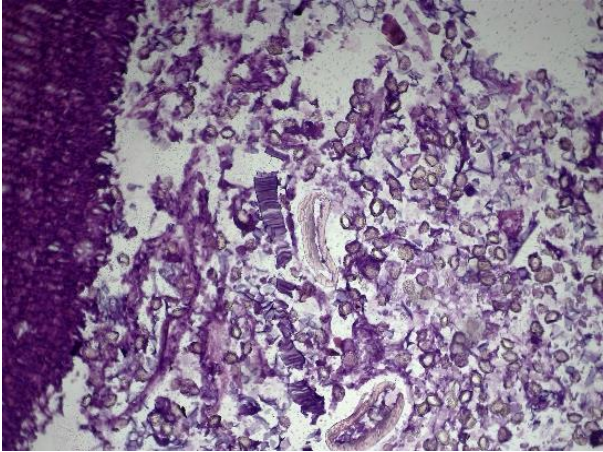
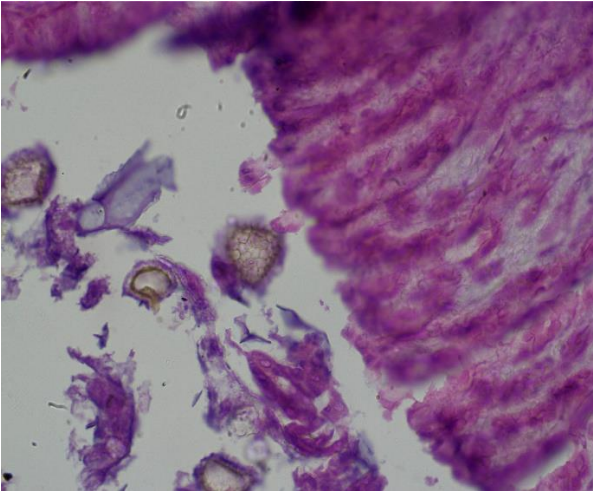
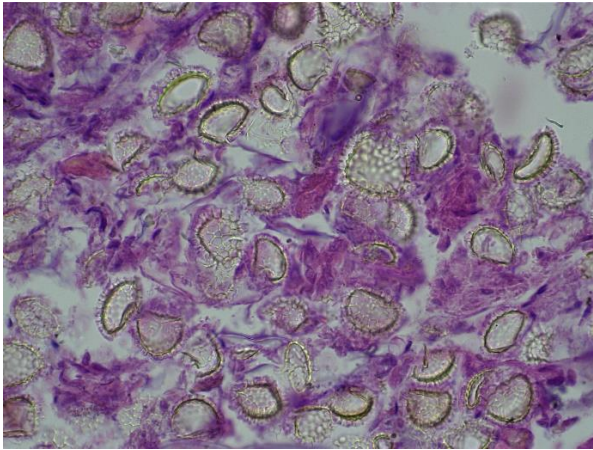


Figure S4. Intact LCS microcapsules found in rats' feces after 2 h of ingestion. A) Optical microscopy images and B) SEM images showing the ornamental LCS structure.

after 1 h of ingestion



after 2 h of ingestion



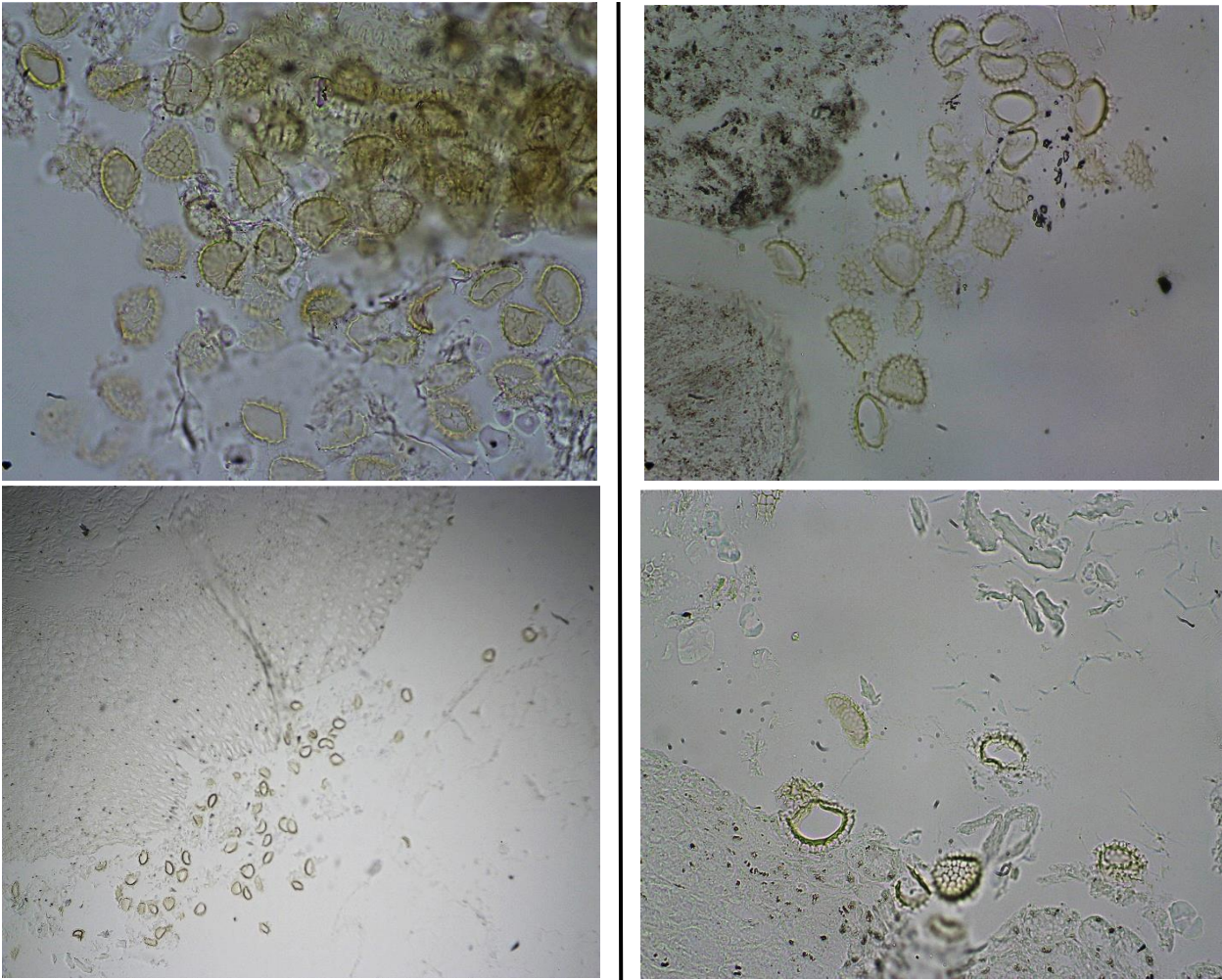


Figure S5. Representative photomicrographs of the stomach sections of rats. Sections of stomach of rats stained with H & E after 1 and 2 h of administration respectively showing intact LCS close and attached to the stomach mucosa at different magnifications.

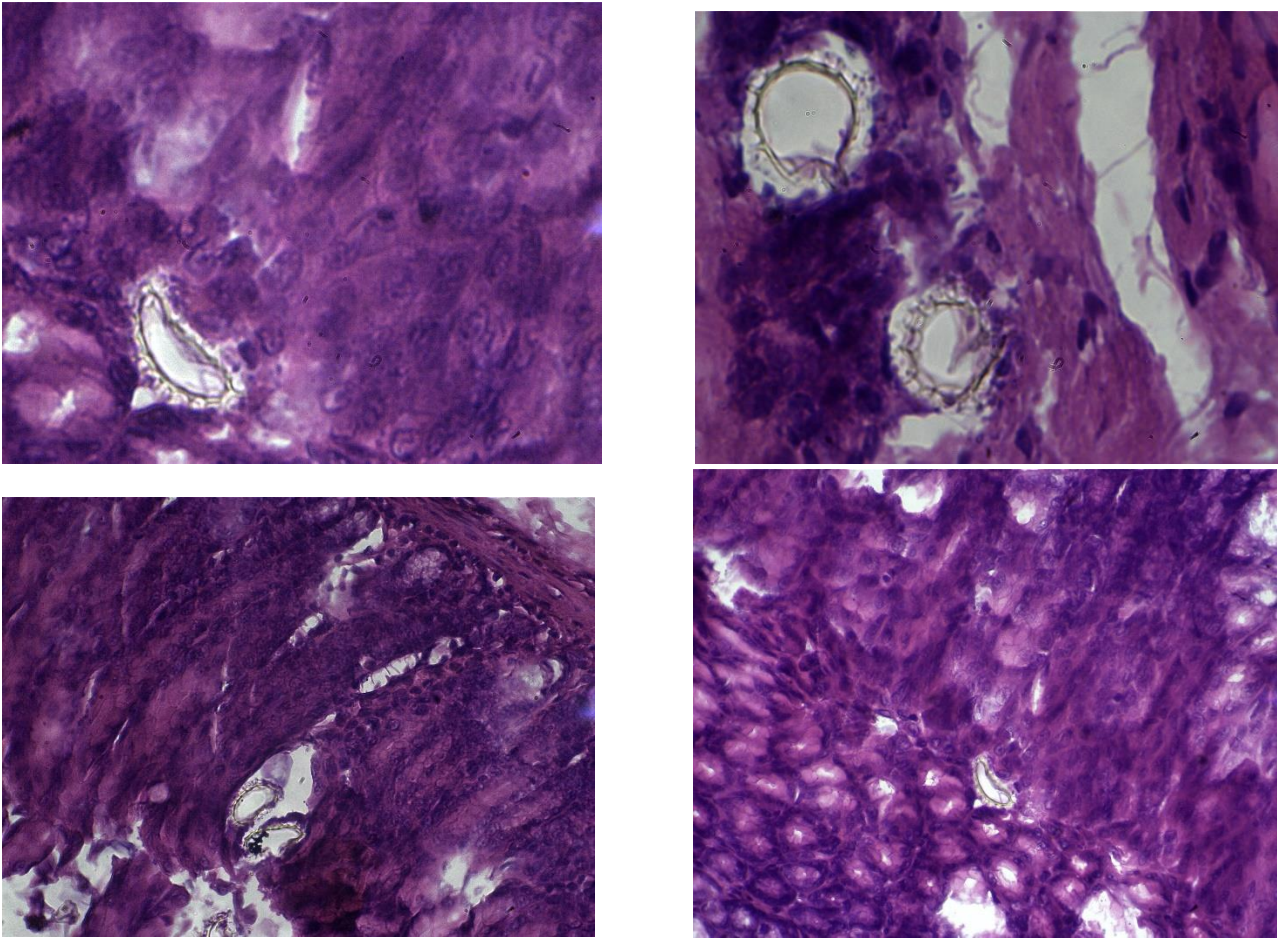


Figure S6. Photomicrographs of the stomach sections of rats stained with H & E after 2 h of administration showing regular and squeezed cross sections of LCS microcapsules in mucosal layer.

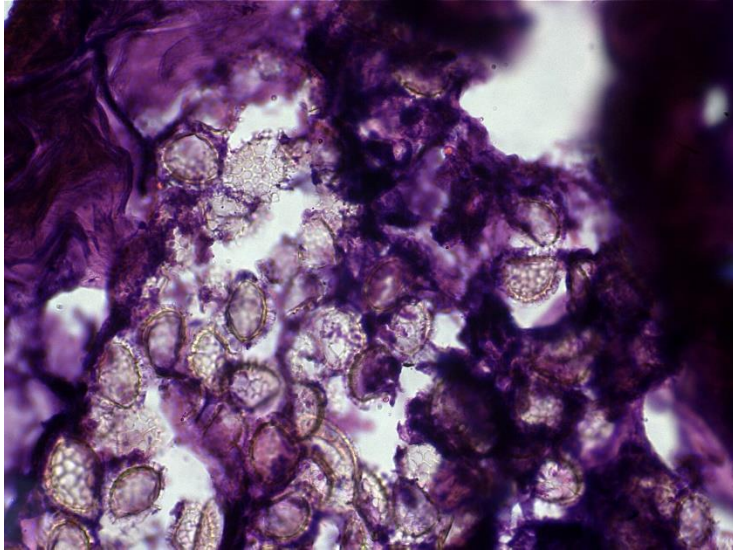


Figure S7. A photomicrograph of the small intestine sections of rats stained with H & E showing intact LCS microcapsules after 2h.

-Movies 1 and 2 represent intact LCS microcapsules found in blood samples of rats after 1h of oral ingestion of approximately 6 million LCS.