

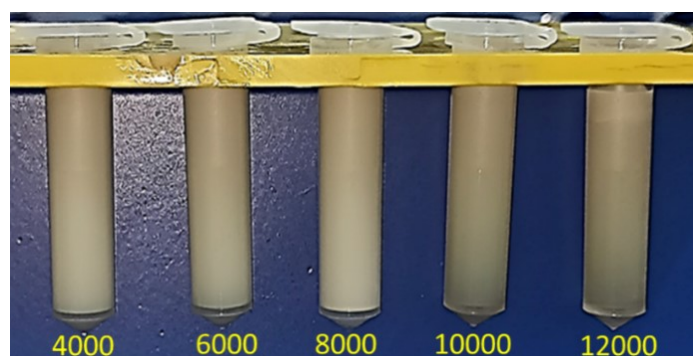
## Investigating the wettability of neem oil nanoemulsion as a green pesticide on leaf surfaces - Optimizing formulation, assessing stability, and enhancing wettability

Jayita Chopra<sup>1\*</sup>, Priyanka Sahoo<sup>1</sup>, Pradeep Kumar Sow<sup>1</sup> and Vivek Rangarajan<sup>1</sup>

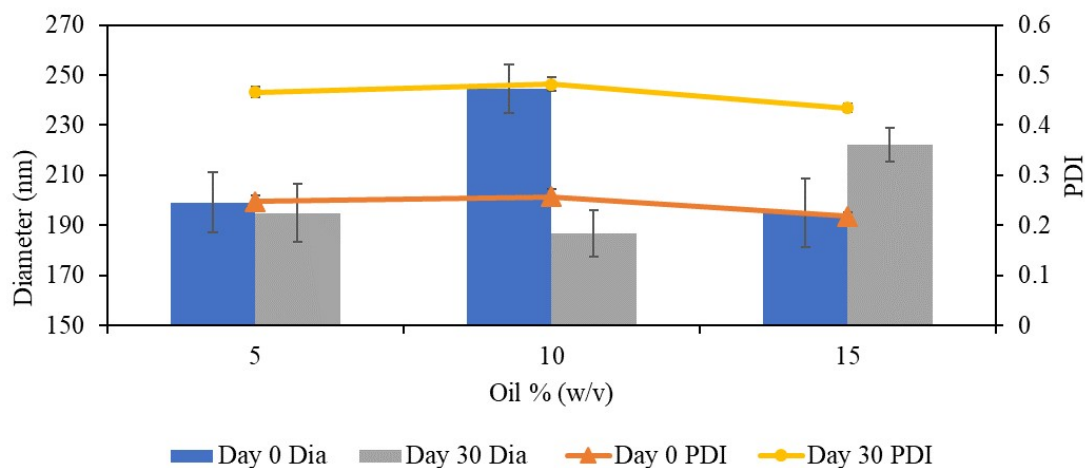
<sup>1</sup>Department of Chemical Engineering, BITS Pilani K K Birla Goa Campus, Goa, India

\*Email: [jayitac@goa.bits-pilani.ac.in](mailto:jayitac@goa.bits-pilani.ac.in)

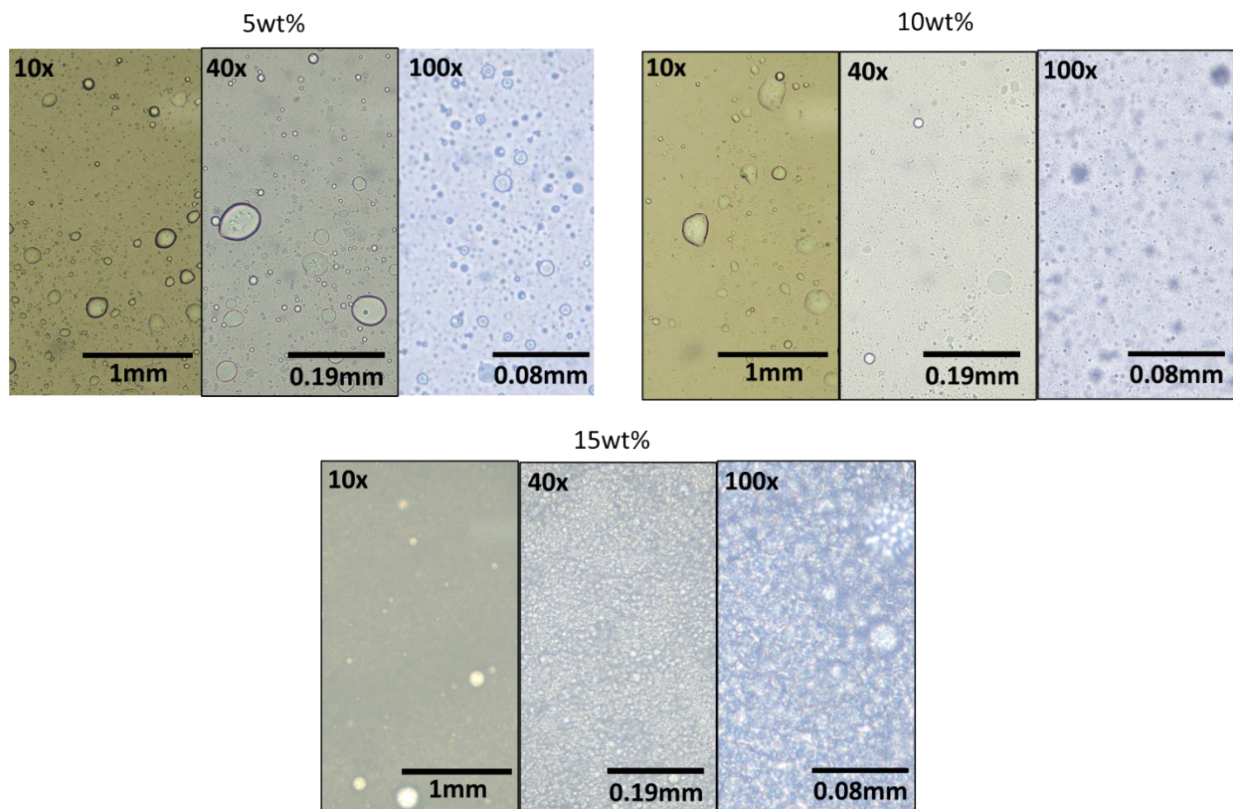
### Supplementary information



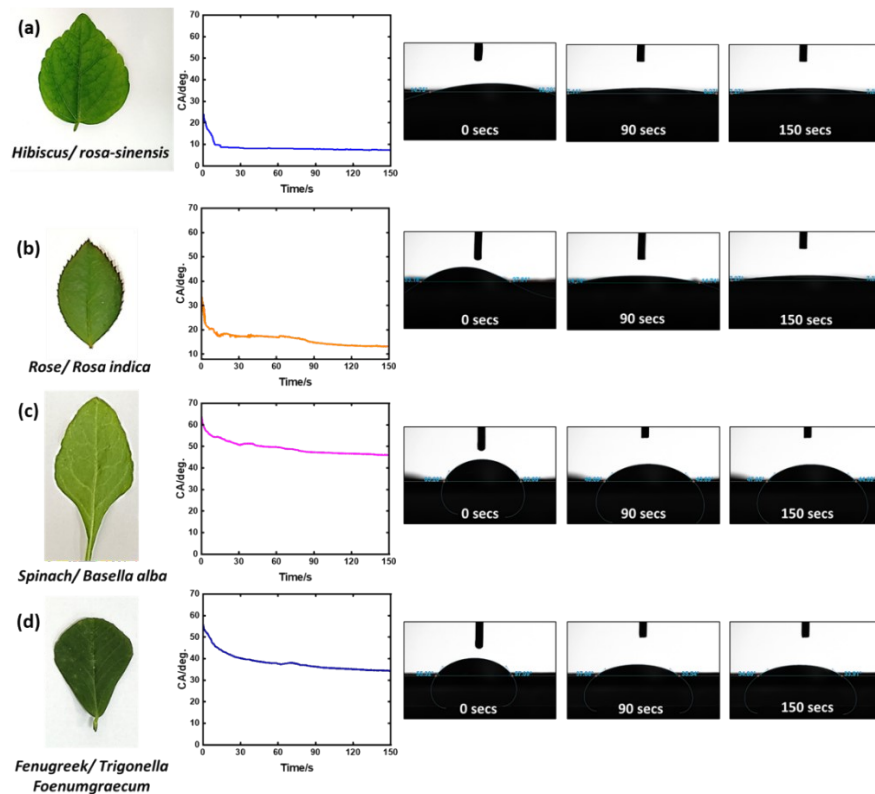
**Fig. S1** Neem oil NE after subjecting to different centrifugal forces



**Fig. S2** Diameter and PDI of NE droplets on 0<sup>th</sup> day and after 30 days



**Fig. S3** Microscope image of the emulsion on glass slide for a) 5wt% neem oil, b) 10 wt% neem oil and c) 15 wt% neem oil at 10x, 40 x and 100x magnification



**Fig. S4** Evolution of the CA over 150 seconds with 15% NE and their corresponding droplet images at 0s, 90s, and 150s during the spreading for (a) Hibiscus, (b) Rose, (c) Spinach, and (d) Fenugreek leaves.