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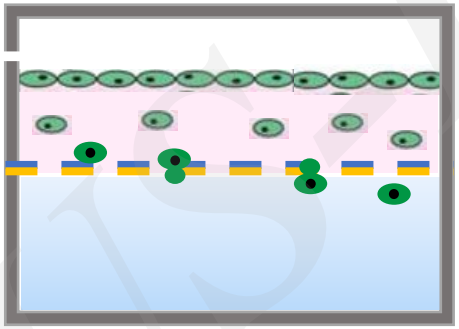
Anti-migratory effects of *Piper betle* leaf aqueous extract on cancer cells and its microtubule targeting properties

Key words: *Piper betle*, Cell migration, Microtubules, Tubulin network

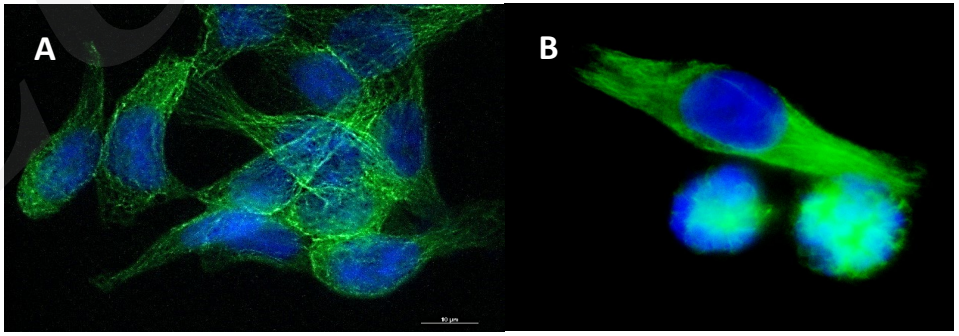
Research Summary

This study investigated the modulation effect of *Piper betle* (PB) aqueous extract on metastatic capability of cancer cells and its effect on the structure and network of tubulin

Piper betle (PB) leaves aqueous extract



Anti-migratory effect of PB on A549 cells was greater than 5-fluorouracil (5-FU)



PB treated HT29 (A) exerts similar long distorted spindle structure as standard microtubules inhibitor, paclitaxel (B)

Innovation points

- PB exhibits greater anti-migratory effect than 5-FU.

- PB triggers microtubules alteration effect on cancer cells. Its effect is comparable to paclitaxel.