THE ROLE OF *WIND* IN *HYDROCHOROUS* MANGROVE PROPAGULE DISPERSAL

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[ϕ] *Equal contribution*

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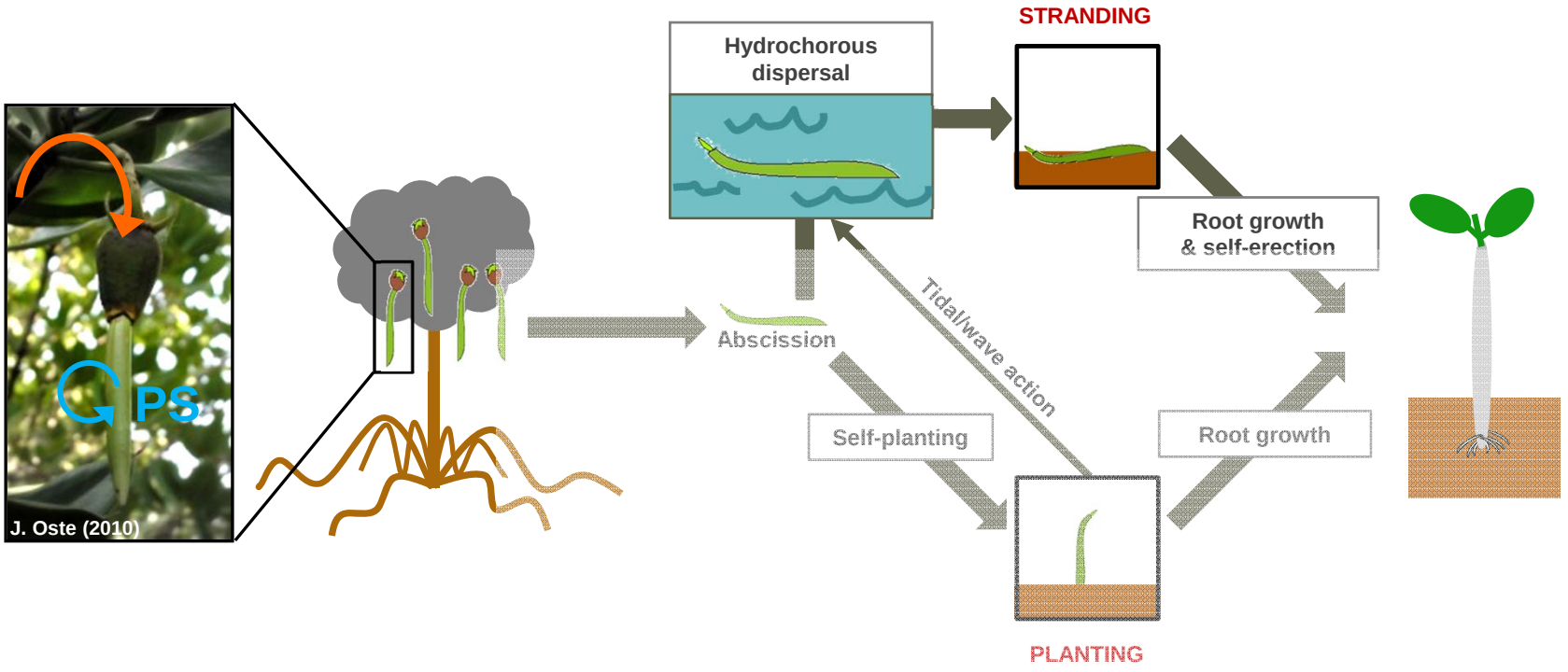
2. HYPOTHESIS

Life cycle of a viviparous mangrove tree

Growth on the parent tree | **Planting/Dispersal** | **Establishment and growth**



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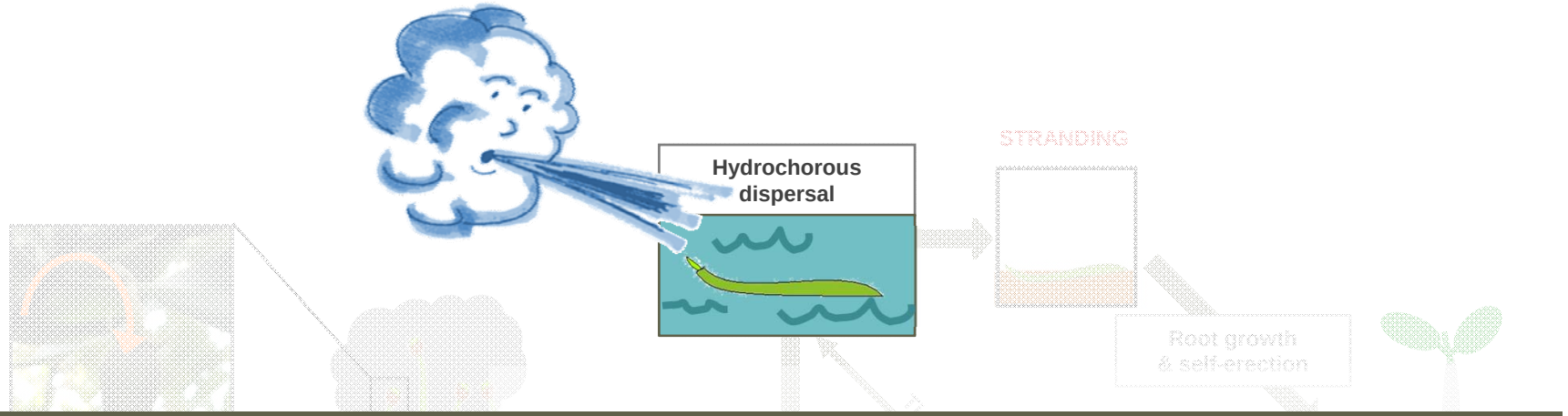
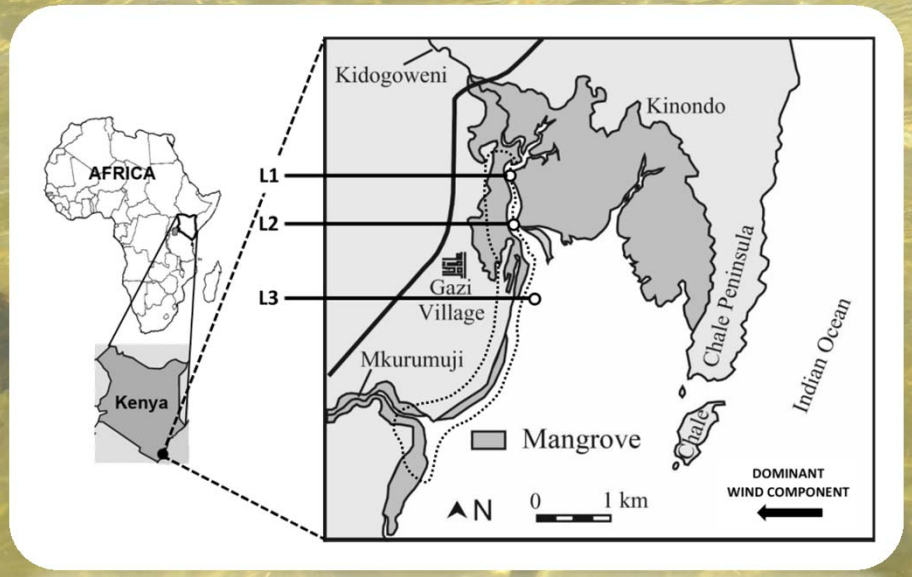
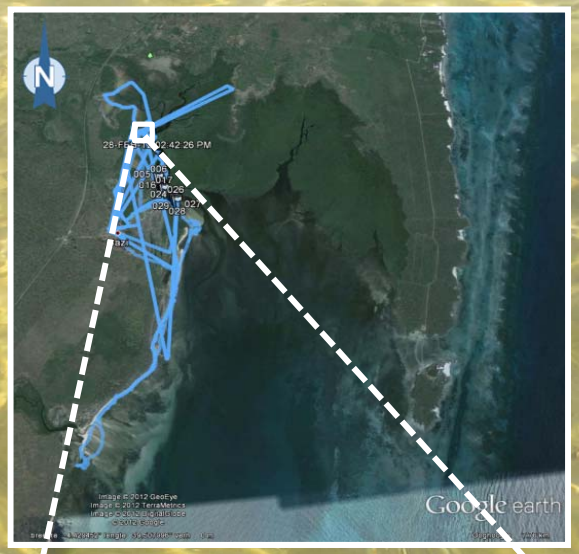
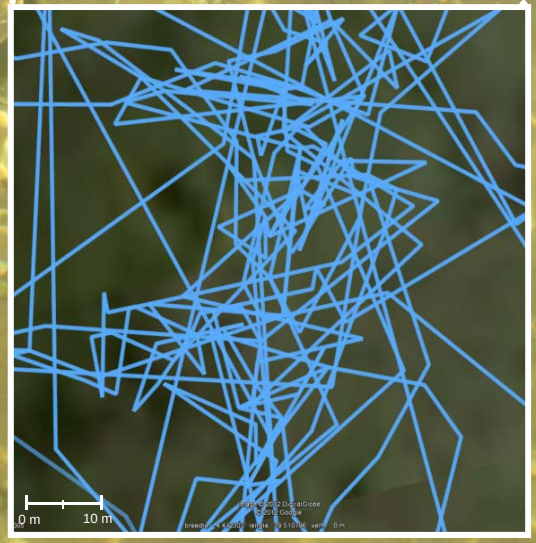


1. Wind is an **important vector** in the dispersal of *hydrochorous* mangrove propagules
2. The effect of wind is **species-specific**
3. The effect of wind largely depends on the propagule's **density** and **floating orientation**

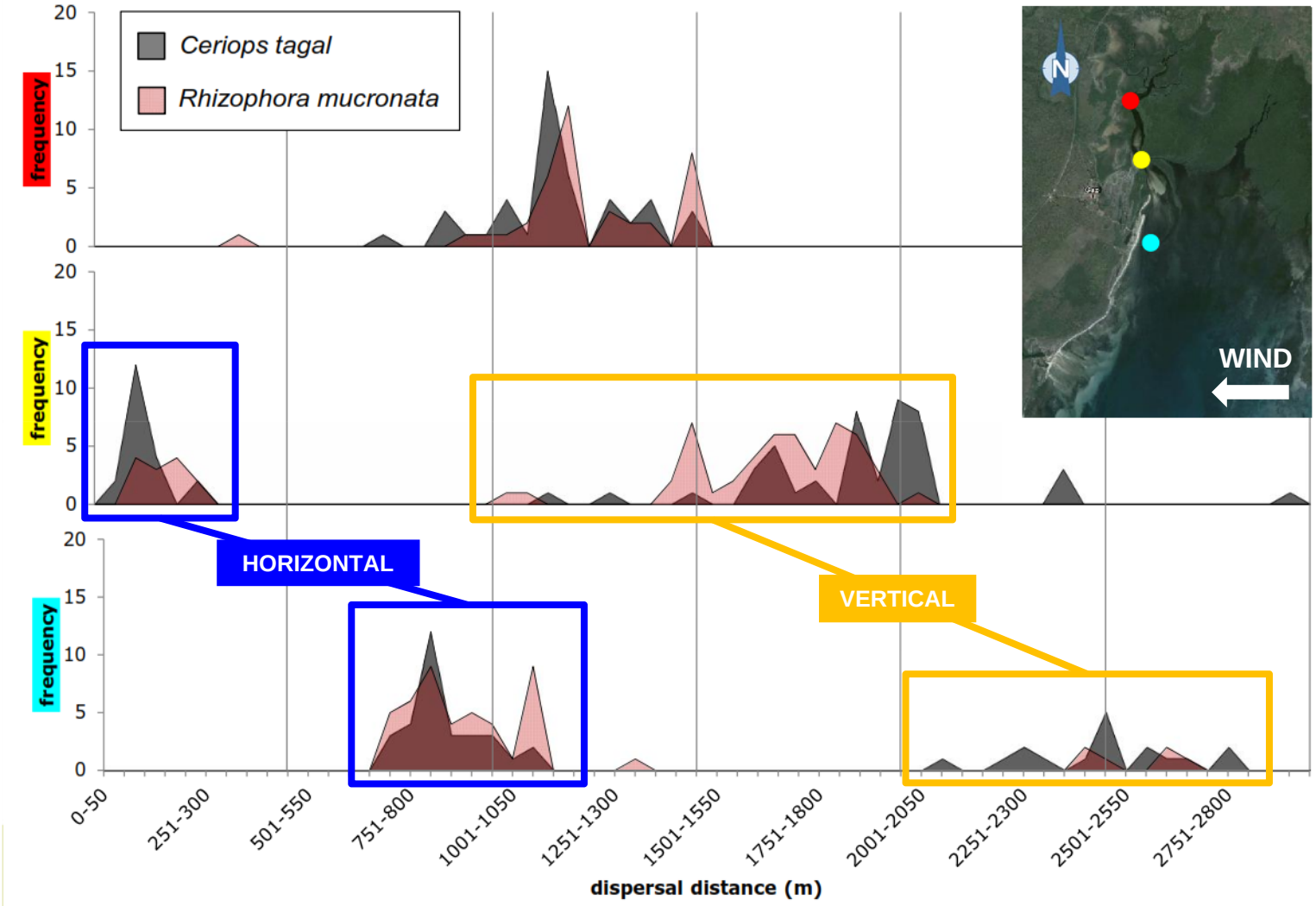
3. FIELD STUDY – M&M



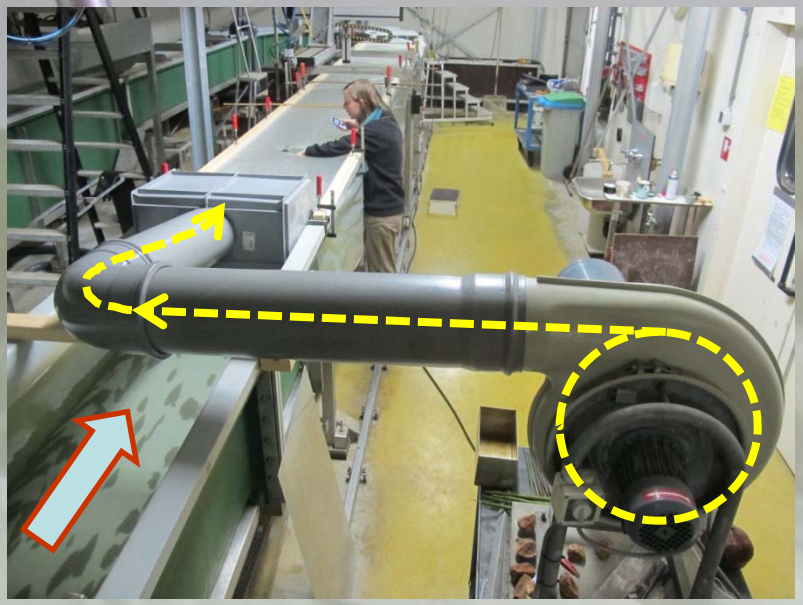




3. FIELD STUDY - RESULTS



3. FLUME STUDY



wind flow direction (cte)

water flow direction (cte)

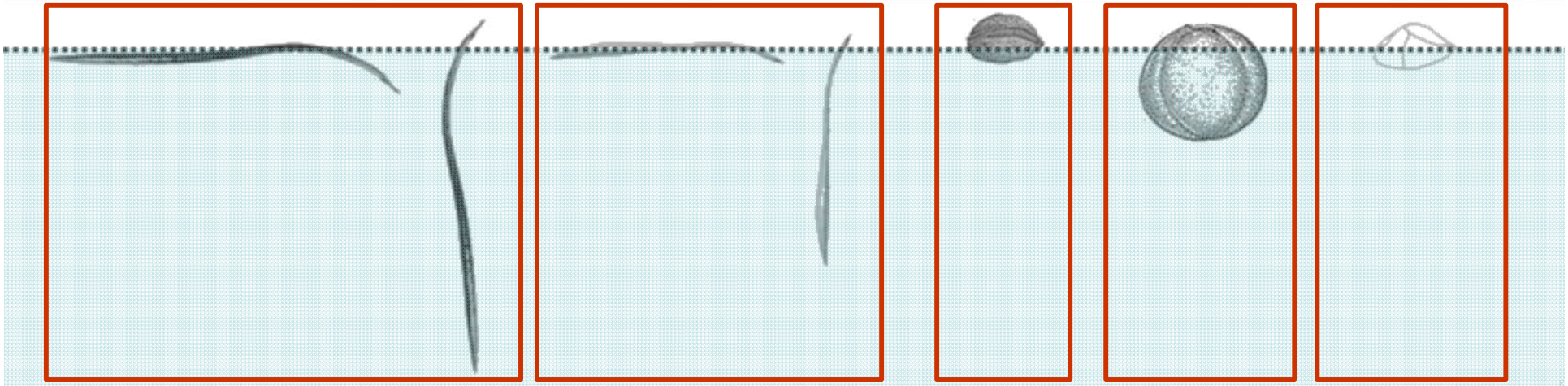
Rhizophora mucronata

Ceriops tagal

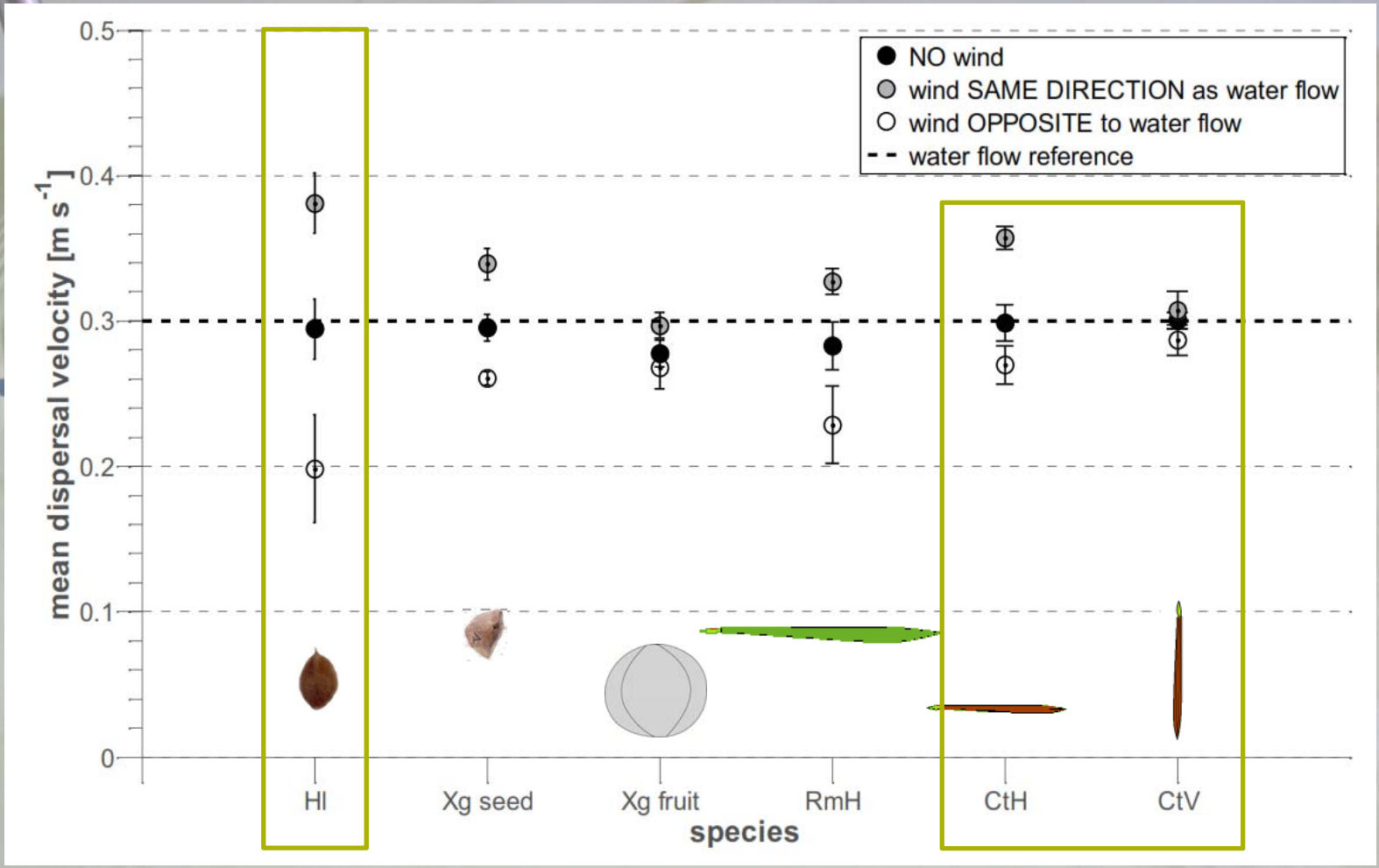
Heritieral littoralis

Xylocarpus granatum (fruit)

Xylocarpus granatum (seed)



3. RESULTS - FLUME



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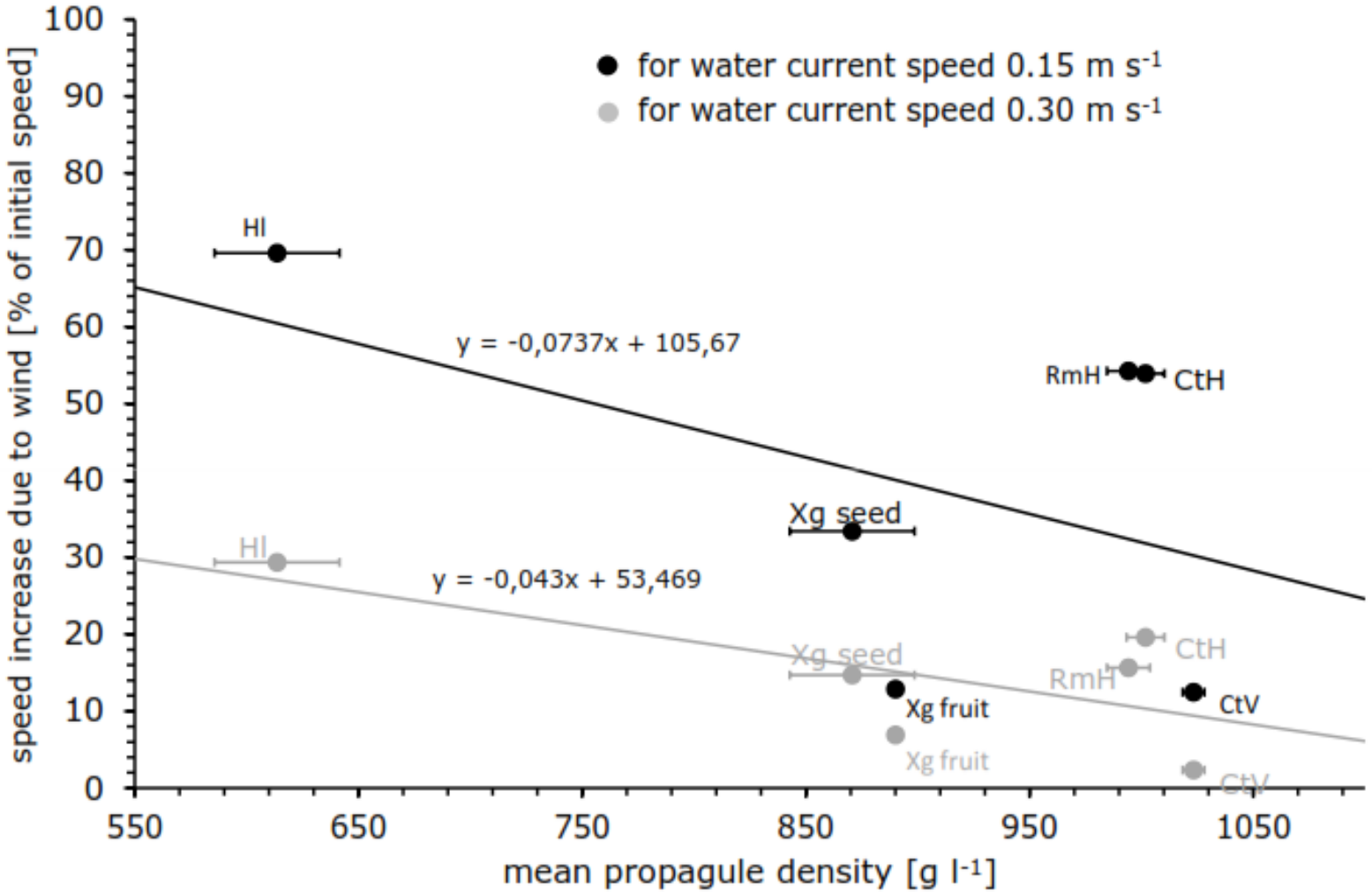

CONCLUSIONS

Dominant wind forces strongly determine the dispersal path of hydrochorous (mangrove) propagules.

The influence of wind is more pronounced...

...for dispersal units with a lower density.

...for horizontally floating propagules
compared to vertical floating counterparts.

MANY THANKS FOR YOUR ATTENTION !
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VLIR Vlaamse Interuniversitaire Raad
UOS University Development Cooperation

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