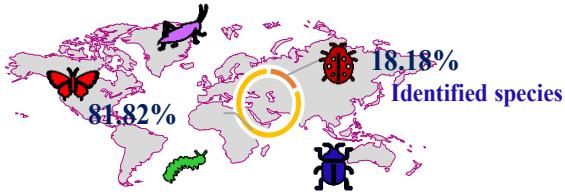
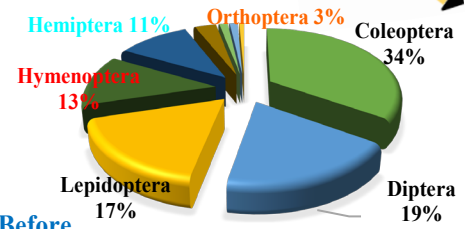


A Guide to Discovering New Insect Species

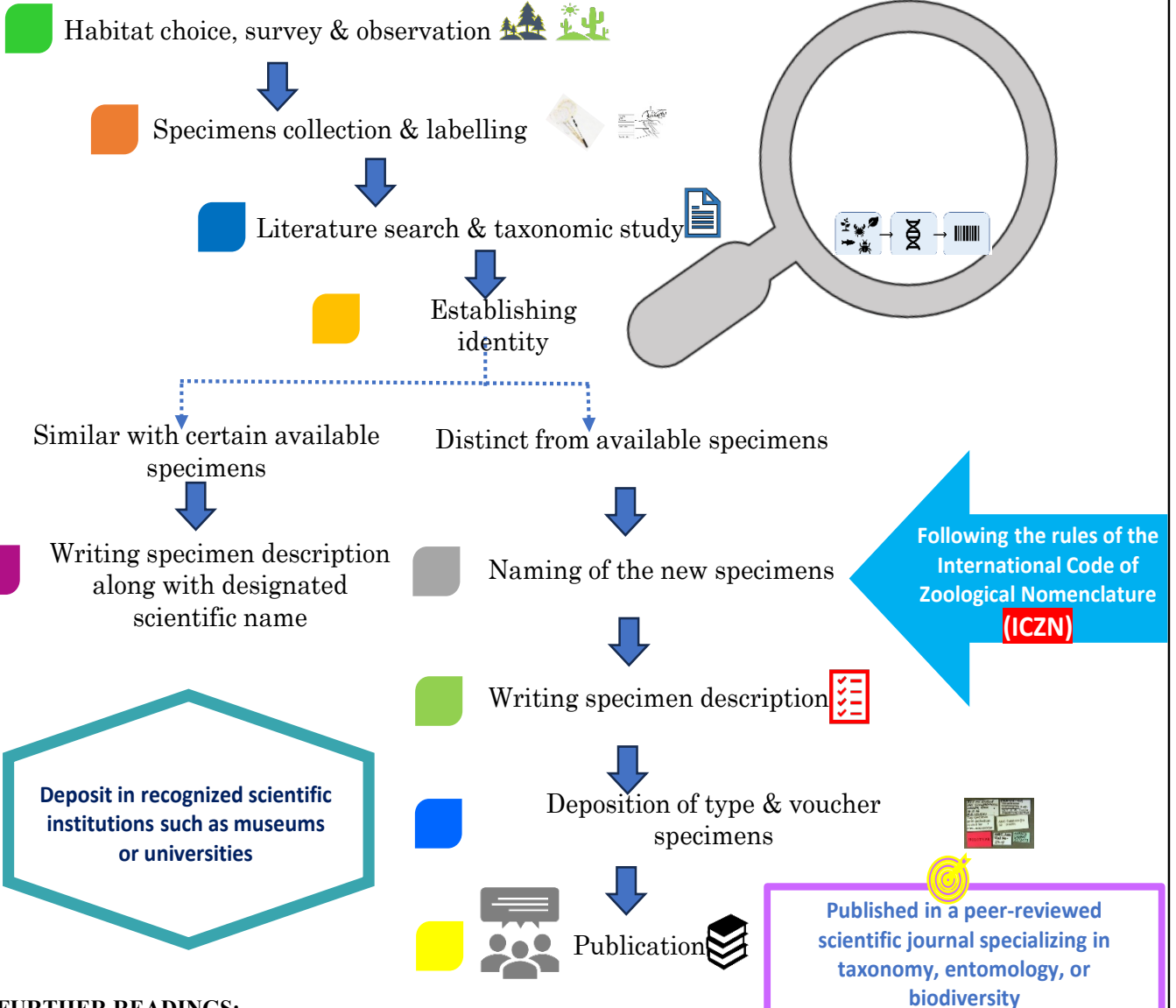
Vidya Madhuri E, Sudipa Das & Shashank P R, IARI, New Delhi- 110012



Majority of insects species will extinct Before they are known to science



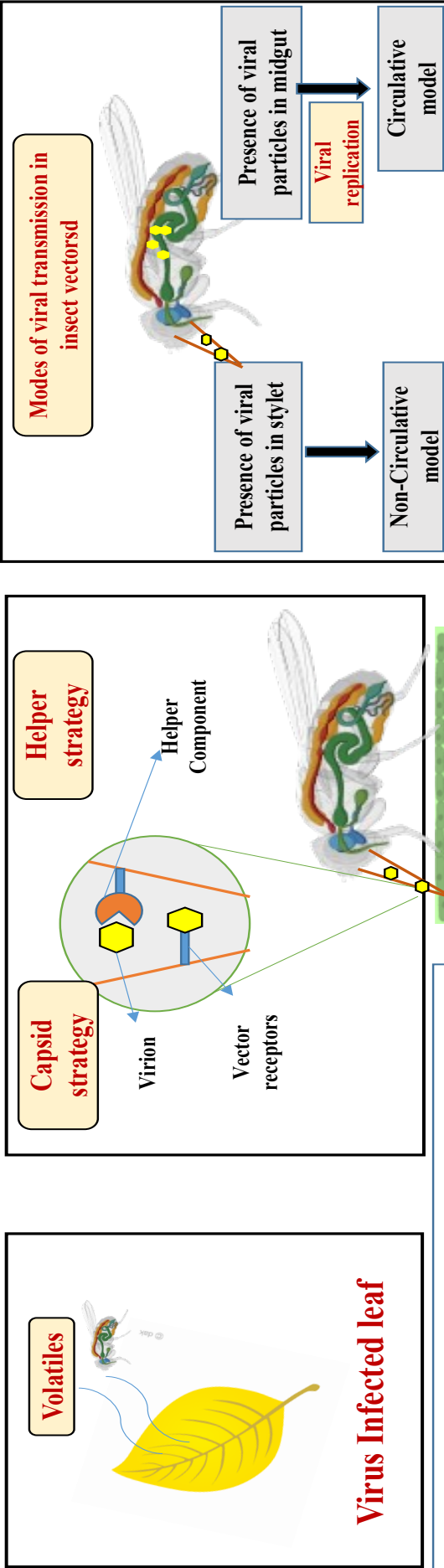
STEPS IN RECOGNIZING SPECIES & ESTABLISHING IDENTITY



FURTHER READINGS:

- Winston, J. E., & Disney, H. (2000). Describing species: practical taxonomic procedure for biologists. *Nature*, 405(6787), 619.
- Catalogue of Life, version 2023-08-1, <https://www.catalogueoflife.org>.

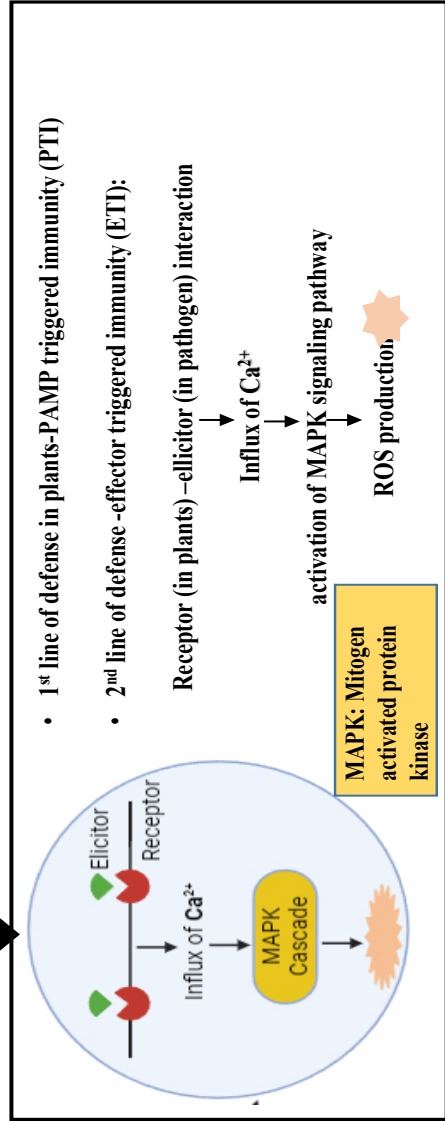
Molecular interactions of insect vectors and viruses



References: Czosnek, H., Hariton-Shalev, A., Sobol, I., Gorovits, R., & Ghanim, M. (2017). The incredible journey of begomoviruses in their whitefly vector. *Viruses*, 9(10), 273.
 Ma, E., Zhu, Y., Liu, Z., Wei, T., Wang, P., & Cheng, G. (2021). Interaction of viruses with the insect intestine. *Annual review of virology*, 8, 115-131.
 Marwal, A., Verma, R. K., Khurana, S. P., & Gaur, R. K. (2018). 12 Molecular Interactions between Plant Viruses and Their Biological Vectors. *Plant viruses: diversity, interaction and management*.

Designed by: S. Aneeqa Noor, University of Delhi
 Pavan J S, ICAR-IARI, New Delhi
 Surbhi Agarwal, University of Delhi
 Pradeep, ICAR-IARI, New Delhi
 Hia Kalita, Assam Agricultural University, Jorhat
 Priyanka Rani, Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan
 Shashank P R and Suresh N M., IARI, New Delhi

Defense response in plants



- 1st line of defense in plants-PAMP triggered immunity (PTI)
- 2nd line of defense-effector triggered immunity (ETI):