



Nagoya University  
Graduate School of Bioagricultural Sciences  
School of Agricultural Sciences



KASETSART  
UNIVERSITY



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UWA  
PERTH AUSTRALIA

# Joint Degree Program WEBINAR SERIES

Date: January 19th, 2026

Time: 16:00 (JST)

Thailand 14:00 / Perth 15:00



## Dr. Paweena Chuenwarin

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Kasetsart University

## Genomics-driven breeding of ridge gourd: SNP discovery, population structure and ToLCNDV resistance

Ridge gourd (*Luffa acutangula*) is an important vegetable crop that is increasingly threatened by Tomato leaf curl New Delhi virus (ToLCNDV). Applying genomics could accelerate breeding for ToLCNDV resistance. Using DArTseq-derived SNPs, the genetic diversity and population structure of diverse ridge gourd germplasm were characterized. Field screening under natural infection, combined with inheritance analysis and genome-wide association studies (GWAS), enabled the identification of SNP markers linked to virus tolerance. These findings provide a foundation for marker-assisted selection and strengthen breeding strategies for developing improved, resilient ridge gourd cultivars. Moreover, the *L. cylindrica* genetics was analyzed to support core collection development.

### Program

16:00 Research Talk

17:00 Information Session on  
the Joint PhD program

### Registration



via the form,  
to receive the Zoom link.  
<https://forms.gle/QZhynJuhDaNPxjB48>

**Open to all — students, faculty, and researchers welcome!**

### About the Joint PhD Program

The Graduate School of Bioagricultural Sciences at Nagoya University offers two Joint PhD Programs with partner universities: Kasetsart University or The University of Western Australia. Students earn a single PhD degree jointly awarded by Nagoya University and the partner university, with opportunities for joint research collaboration and cultural exchange.



[https://www.agr.nagoya-u.ac.jp/international-exchange/ku-jdp\\_new.html](https://www.agr.nagoya-u.ac.jp/international-exchange/ku-jdp_new.html)



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