



Pratya Nuankaew <nuankaew.p@gmail.com>

6th International Conference on Data Engineering and Communication Technology (ICDECT-2025) : Submission (254) has been created.

1 message

Microsoft CMT <noreply@msr-cmt.org>
To: pratya.nu@up.ac.th

Mon, Oct 13, 2025 at 12:28 PM

Hello,

The following submission has been created.

Track Name: ICDECT2025

Paper ID: 254

Paper Title: AI-driven Image Analysis Using YOLO for Thai Herbal Recommendations in Skin Disease Treatment

Abstract:

This study aimed to develop and evaluate YOLO models for classifying Thai medicinal herbs used in treating skin diseases. A dataset of 12 herbal species with a total of 15,244 images was utilized, along with data augmentation and transfer learning to enhance diversity and robustness. Results showed that YOLOv8s achieved the best performance, with a maximum mAP of 0.9998 and nearly perfect precision and recall, while requiring minimal training time. In comparison, YOLOv8n attained high accuracy (mAP = 0.9779) but needed more training time, and YOLOv11n, although faster, was slightly less effective. Overall, YOLOv8s offered the most balanced balance of accuracy, speed, and stability, making it the most suitable model for further development. The study highlights the potential of combining AI with Thai traditional medicine. It suggests future prototype systems or mobile apps that could provide practical, accessible, and culturally relevant support for managing skin diseases in both Thai and global healthcare settings.

Created on: Mon, 13 Oct 2025 05:28:39 GMT

Last Modified: Mon, 13 Oct 2025 05:28:39 GMT

Authors:

- wongpanya.nu@up.ac.th
- jureeporn.tr@up.ac.th
- nattakamon.ph@up.ac.th
- orawee.th@up.ac.th
- thapanapong.sa@up.ac.th
- pratya.nu@up.ac.th (Primary)

Secondary Subject Areas: Not Entered

Submission Files:

[ICDECT_2025_12_PID_254@icdect.com](#) (004) - Draft for Submission [2025-10-13] - no author.pdf (500 Kb, Mon, 13 Oct 2025 05:17:43 GMT)

Submission Questions Response: Not Entered

Thanks,
CMT team.

Please do not reply to this email as it was generated from an email account that is not monitored.

To stop receiving conference emails, you can check the 'Do not send me conference email' box from your User Profile.

Microsoft respects your privacy. To learn more, please read our [Privacy Statement](#).

Microsoft Corporation
One [Microsoft Way](#)
Redmond, WA 98052