

- [13] Grinblat, G.L., Uzal, L.C., Larese, M.G., Granitto, P.M., 2016. Deep learning for plant identification using vein morphological patterns. *Comput. Electron. Agric.* 127, 418–424. <https://doi.org/10.1016/j.compag.2018.01.009>
- [14] Mohanty, S.P., Hughes, D.P., Salathé, M., 2016. Using deep learning for image-based plant disease detection. *Front. Plant Sci.* 7 <http://dx.doi.org/10.3389/fpls.2016.01419>. Article: 1419.
- [15] Sladojevic, S., Arsenovic, M., Anderla, A., Culibrk, D., Stefanovic, D., 2016. Deep neural networks based recognition of plant diseases by leaf image classification. *Computat. Intelligence Neurosci.* <http://dx.doi.org/10.1155/2016/3289801>. Article ID: 3289801.
- [16] Pawara, P., Okafor, E., Surinta, O., Schomaker, L., Wiering, M. 2017. Comparing local descriptors and bags of visual words to deep convolutional neural networks for plant recognition. 6th Intl Conf. on Pattern Recognition Applications and Methods (ICPRAM 2017)
- [17] Fuentes, A., Yoon, S., Kim, S.C., Park, D.S., 2017. A robust deep-learning-based detector for real-time tomato plant diseases and pest recognition. *Sensors* 17, 2022. <http://dx.doi.org/10.3390/s17092022>.
- [18] Konstantinos P. Ferentinos, Deep learning models for plant disease detection and diagnosis *Computers and Electronics in Agriculture*, vol.145, pp. 311-318, 2018, DOI <https://doi.org/10.1016/j.compag.2018.01.009>
- [19] Sambuddha Ghosal, David Blystone, Asheesh K. Singh, Baskar Ganapathysubramanian, Arti Singh, and Soumik Sarkar, An explainable deep machine vision framework for plant stress phenotyping. *PNAS* May 1, 2018 115 (18) 4613-4618; <https://doi.org/10.1073/pnas.1716999115>
- [20] A. Nazri, N. Mazlan, and F. Muharam, "Research article Penyek: Automated brown planthopper detection from imperfect sticky pad images using deep convolutional neural network," *PLoS One*, vol. 13, no. 12, Dec. 2018, doi: 10.1371/journal.pone.0208501.
- [21] Xia C, Chon TS, Ren Z, Lee JM. Automatic identification and counting of small size pests in greenhouse conditions with low computational cost. *Ecological Informatics*. 2015;29(9): 139-146
- [22] Li Y, Xia C, Lee J. Detection of small-sized insect pest in greenhouses based on multifractal analysis. *Optik-International Journal for Light and Electron Optics*. 2015;126(19):2138-2143
- [23] H. Yalcin, "Vision based automatic inspection of insects in pheromone traps," in *IEEE Int. Conf. on Agro-Geoinformatics*, 2015.
- [24] Weiguang Ding and Graham Taylor. 2016. Automatic moth detection from trap images for pest management. *Comput. Electron. Agric.* 123, C (April 2016), 17-28. DOI: <https://doi.org/10.1016/j.compag.2016.02.003>
- [25] Karlos Espinoza, Diego L. Valera, José A. Torres, Alejandro López, and Francisco D. Molina-Aiz. 2016. Combination of image processing and artificial neural networks as a novel approach for the identification of Bemisia tabaci and Frankliniella occidentalis on sticky traps in greenhouse agriculture. *Comput. Electron. Agric.* 127, C (September 2016), 495-505. DOI: <https://doi.org/10.1016/j.compag.2016.07.008>
- [26] Ebrahimi MA, Khoshtaghaza MH, Minaei S, Jamshidi B. Vision-based pest detection based on SVM classification method. *Computers and Electronics in Agriculture*. 2017; 137:52-58
- [27] José García, Christopher Pope, and Francisco Altimiras, "A Distributed -Means Segmentation Algorithm Applied to Lobesia botrana Recognition," *Complexity*, vol. 2017, Article ID 5137317, 14 pages, 2017. <https://doi.org/10.1155/2017/5137317>.
- [28] Maharlooei, M.; Sivarajan, S.; Bajwa, S.G.; Harmon, J.P.; Nowatzki, J. Detection of soybean aphids in a greenhouse using an image processing technique. *Comput. Electron. Agric.* 2017, 132, 63–70.
- [29] Yu Sun, Xuanxin Liu, Mingshuai Yuan, Lili Ren, Jianxin Wang, Zhibo Chen, "Automatic in-trap pest detection using deep learning for pheromone-based Dendroctonus valens monitoring", *Biosystems Engineering*, Volume 176, Pages 140-150, DOI:10.1016/j.biosystemseng.2018.10.012, December 2018.
- [30] J. G. M. Esgario, R. A. Krohling, and J. A. Ventura, "Deep learning for classification and severity estimation of coffee leaf biotic stress," *Comput. Electron. Agric.*, vol. 169, p. 105162, Feb. 2020, doi: 10.1016/j.compag.2019.105162.
- [31] K. Thenmozhi and U. Srinivasulu Reddy, "Crop pest classification based on deep convolutional neural network and transfer learning," *Comput. Electron. Agric.*, vol. 164, p. 104906, Sep. 2019, doi: 10.1016/j.compag.2019.104906.
- [32] M. Hayashi, K. Tamai, Y. Owashi, and K. Miura, "Automated machine learning for identification of pest aphid species (Hemiptera: Aphididae)," *Appl. Entomol. Zool.*, vol. 54, no. 4, pp. 487–490, Nov. 2019, doi: 10.1007/s13355-019-00642-0.
- [33] J. Arunnehr, B. S. Vidhyasagar, and H. Anwar Basha, "Plant Leaf Diseases Recognition Using Convolutional Neural Network and Transfer Learning," in *Lecture Notes in Electrical Engineering*, 2020, vol. 637, pp. 221–229, doi: 10.1007/978-981-15-2612-1_21.
- [34] G. Polder, P. M. Blok, H. A. C. de Villiers, J. M. van der Wolf, and J. Kamp, "Potato Virus Y Detection in Seed Potatoes Using Deep Learning on Hyperspectral Images," *Front. Plant Sci.*, vol. 10, p. 209, Mar. 2019, doi: 10.3389/fpls.2019.00209.
- [35] M. M. Ozguven and K. Adem, "Automatic detection and classification of leaf spot disease in sugar beet using deep learning algorithms," *Phys. A Stat. Mech. its Appl.*, vol. 535, p. 122537, Dec. 2019, doi: 10.1016/j.physa.2019.122537.
- [36] V. K. Shrivastava, M. K. Pradhan, S. Minz, and M. P. Thakur, "Rice Plant Disease Classification Using Transfer Learning Of Deep Convolution Neural Network," 2019, doi: 10.5194/isprs-archives-XLII-3-W6-631-2019.
- [37] V. Pallagani, V. Khandelwal, B. Chandra, V. Udutalpalay, D. Das, and S. P. Mohanty, "DCrop: A deep-learning based framework for accurate prediction of diseases of crops in smart agriculture," in *Proceedings - 2019 IEEE International Symposium on Smart Electronic Systems, iSES 2019*, 2019, pp. 29–33, doi: 10.1109/iSES47678.2019.00020.
- [38] B. Espejo-Garcia, N. Mylonas, L. Athanasakos, S. Fountas, and I. Vasilakoglou, "Towards weeds identification assistance through transfer learning," *Comput. Electron. Agric.*, vol. 171, p. 105306, Apr. 2020, doi: 10.1016/j.compag.2020.105306.
- [39] K. Hu, G. Coleman, S. Zeng, Z. Wang, and M. Walsh, "Graph weeds net: A graph-based deep learning method for weed recognition," *Comput. Electron. Agric.*, vol. 174, p. 105520, Jul. 2020, doi: 10.1016/j.compag.2020.105520.
- [40] A. Picon, M. Seitz, A. Alvarez-Gila, P. Mohnke, A. Ortiz-Barredo, and J. Echazarra, "Crop conditional Convolutional Neural Networks for massive multi-crop plant disease classification over cell phone acquired images taken on real field conditions," *Comput. Electron. Agric.*, vol. 167, p. 105093, Dec. 2019, doi: 10.1016/j.compag.2019.105093.
- [41] S. Sanga, V. Mero, D. Machuve, and D. Mwanganda, "Mobile-Based Deep Learning Models for Banana Diseases Detection," *Apr. 2020*.
- [42] J. Yu, S. M. Sharpe, A. W. Schumann, and N. S. Boyd, "Deep learning for image-based weed detection in turfgrass," *Eur. J. Agron.*, vol. 104, pp. 78–84, Mar. 2019, doi: 10.1016/j.eja.2019.01.004.
- [43] M. Hasan, B. Tanawala, and K. J. Patel, "Deep Learning Precision Farming: Tomato Leaf Disease Detection by Transfer Learning," *SSRN Electron. J.*, Apr. 2019, doi: 10.2139/ssrn.3349597.
- [44] M. H. Masood, H. Saim, M. Taj, and M. M. Awais, "Early Disease Diagnosis for Rice Crop," *Apr. 2020*.
- [45] J. Champ, A. Mora-Fallas, H. Goëau, E. Mata-Montero, P. Bonnet, and A. Joly, "Instance segmentation for the fine detection of crop and weed plants by precision agricultural robots," *Appl. Plant Sci.*, vol. 8, no. 7, Jul. 2020, doi: 10.1002/aps3.11373.
- [46] M. H. Asad and A. Bais, "Weed detection in canola fields using maximum likelihood classification and deep convolutional neural network," *Inf. Process. Agric.*, Dec. 2019, doi: 10.1016/j.inpa.2019.12.002.