

## Projekta Izp-2020/1-0353 rezultāti

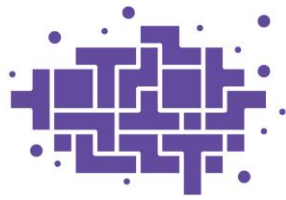
### Aveņu un krūmcidoniju vieda bezkontakta fenotipēšana, izmantojot mašīnmācīšanās metodes, hiperspektrālos un 3D attēlus

*Oriģināli zinātniskie raksti, kas publicēti zinātniskos žurnālos, rakstu krājumos vai konferenču rakstu krājumos, kuri ir indeksēti datu bāzēs Web of Science Core Collection, SCOPUS vai ERIH PLUS*

1. Kaufmane, E.; Sudars, K.; Namatēvs, I.; Kalniņa, I.; Judvaitis, J.; Balašs, R.; Strautiņa S. QuinceSet: Dataset of annotated Japanese quince images for object detection. - Data in Brief, 2022, <https://doi.org/10.1016/j.dib.2022.108332>
2. Strautiņa, S.; Kalniņa, I.; Kaufmane, E.; Sudars, K.; Namatēvs, I.; Nikulins, A.; Edelmers, E. RaspberrySet: Dataset of Annotated Raspberry Images for Object Detection - Data, 2023, <https://doi.org/10.3390/data8050086>
3. Kaufmane, E.; Edelmers, E.; Sudars, K.; Namatevs, I.; Nikulins, A.; Strautina, S.; Kalnina, I.; Peter, A. Three-Dimensional Imaging in Agriculture: Challenges and Advancements in the Phenotyping of Japanese Quinces in Latvia. – Horticulturae, 2023, <https://doi.org/10.3390/horticulturae9121347>
4. Strautiņa, S.; Kalniņa, I.; Kaufmane, E.; Sudars, K.; Namatēvs, J.; Judvaitis, J.; Balašs, R.; Nikulins, A. Initial results of the development of intelligent non-invasive phenotyping of raspberries using machine learning, and 3D imaging. - Proceedings of International Symposium on Advances in Berry Crops/31 th international Horticultural Congress/Acta Hortic., 2023, <https://doi.org/10.17660/ActaHortic.2023.1381.14>
5. Sudars, K.; Namatevs, I.; Nikulins, A.; Balass, R.; Peter, A.; Strautina, S.; Kaufmane, E.; Kalnina, I. Semantic Segmentation Using U-Net Deep Learning Network for Quince Phenotyping on RGB and HyperSpectral Images - 2023, <https://ieeexplore.ieee.org/document/10177638>

#### *Zinātniskās datubāzes un datu kopas*

1. Kaufmane, E.; Sudars, K.; Namatēvs, I.; Kalniņa, I.; Judvaitis, J.; Balašs, R.; Strautiņa, S. QuinceSet: Dataset of Annotated Japanese Quince Images for Object Detection. - Zenodo, 2022, <https://doi.org/10.5281/zenodo.64022502>.
2. Strautiņa, S.; Kalniņa, I.; Kaufmane, E.; Sudars, K.; Namatēvs, I.; Nikulins, A.; Judvaitis, J.; Balašs, R. RaspberrySet: Dataset of Annotated Raspberry Images for Object Detection. - Zenodo, 2022, <https://doi.org/10.5281/zenodo.7014727>



# FLPP

FUNDAMENTĀLO UN  
LIETIŠĶO PĒTĪJUMU  
PROJEKTI

*Jauns produkts, jauna tehnoloģija*

1. Sudars, K. AKFEN semantic segmentation of HSI and RGB/PNG images using U-Net. 2023, <https://pubgit.edi.lv/kaspars.sudars/akfen-semantic-segmentation>
2. Ņikuļins, A. AKFEN Raspberry drupelet counter. 2023, <https://pubgit.edi.lv/arturs.nikulins/drupes-counter>
3. Sudars, K. AKFEN object detector. 2023, <https://pubgit.edi.lv/kaspars.sudars/akfen-object-detector>
4. Ņikuļins, A. AKFEN Raspberry and Japanese quince 3D Detection. 2023, <https://pubgit.edi.lv/arturs.nikulins/object-detection-3D>