

Popular scientific project description for project funded by Ekhagastiftelsen

Popular scientific project description is to be submitted within 2 months of project grant.

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| Application number: | 2019-74 |
| Project title: | Genotyping of the USDA-NPGS Carrot Collection |
| Receiver of grant (name, address): | University of Wisconsin-Madison, investigators I.L. Goldman and S.H. Brainard, Department of Horticulture, 11575 Linden Drive, Madison, Wisconsin, 53706, USA |
| Contact / project manager: | Irwin Goldman, ilgoldma@wisc.edu |
| Project start (yyyy-mm-dd): * | 2019-08-01 |
| Project end (yyyy-mm-dd): * | |
| By Ekhagastiftelsen granted sum: | SEK 110,000 |

Project description: (max 150 words)

We have been identifying genes associated with carrot root shape and market class and expanding the use of market class diversity for organic carrot production. We have developed a digital phenotyping platform that has allowed us to rapidly and accurately collect detailed measurements on all of the different market classes of carrot; and we are now in a unique position to phenotype the entire US National Plant Germplasm System Plant Introduction collection for carrot, which includes approximately 900 accessions. With this large phenotyping effort, we will be able to simultaneously genotype the collection and then make these genotype data available to any carrot worker around the world who wishes to work with this unique collection. This collection provides a tremendous wealth of carrot diversity, and the data we will be able to provide should allow for expanded use of market class diversity in carrot, favoring organic production systems.

* Dates for project start and end should be the dates for which the grant is received (Not dates for total project if longer than period for which grant is received)