

# performedia

## User Guide - Poster Presenters

<b>Login Page</b>	<b>2</b>
<b>Edit Your Poster Page</b>	<b>3</b>
<b>How to Record or Upload a Video</b>	<b>5</b>
<b>Viewing, editing, publishing your video</b>	<b>8</b>
<b>Chat with the Attendees</b>	<b>11</b>

# Login Page

Login to your account with your username and password.

---

## Login

**Username**

**Password**

**LOGIN**

Remember Me

[Forgot your password?](#)

Trouble logging in? Let us know at [support@performedia.com](mailto:support@performedia.com)

# Edit Your Poster Page

Once you're logged in, click "Edit Poster Page" on the left-hand side of the page.

## My Profile

**My Profile**

Change Password

View My Profile

**Edit Poster Page** ←

Record Video

My Videos

View My Profile

**Profile Image**

Choose Image

First Name  
Mayank

Last Name  
Gupta

E-mail \*  
portal+poster1@performedia.com

Biographical Info

B I U S T A · ¶ · ☰ · ☰ · ☰ · ☰ · 📄 🔗 ↻ ↺ </>

# Edit Poster Page

My Profile

Change Password

View My Profile

**Edit Poster Page**

Record Video

My Videos

[View Page](#)

**Title \***

Exploiting high throughput indoor phenotyping and machine learning to characterize a diverse B. napu

**Content**

Paragraph **B I** [List Icons] [Quote Icon] [Align Icons] [Link Icon] [Table Icon]

Visual | Text

Phenotyping is considered a significant bottleneck impeding fast and efficient crop improvement needed to ensure sustainable food production for a growing world population faced with uncertain environmental challenges. Similar to many crops, Brassica napus, an internationally important oilseed crop, suffers from low genetic diversity and will require exploitation of diverse genetic resources to develop locally adapted, high yielding and stress resistant cultivars. Here, we present a pilot study on the feasibility of using high throughput indoor phenotyping and machine learning to capture the phenotypic diversity of agronomically important traits in a diverse B. napus breeding population. The experiment comprised 50 B. napus genotypes, grown and phenotyped in six replicates under two treatment conditions (control and drought) over 38 days at the LemnaTec Scanalyzer 3D facility at University of Nebraska. Using image processing of RGB and NIR images, we extracted growth traits such as plant height, width, and projected leaf area, and derived traits

**Poster Video Link**

<https://us2-addpipe.s3.amazonaws.com/355c80eed5438712b6e9f5ea1ada5d57/HxjwRFAOBhiZn7Dq>

**Poster PDF/Image**

 Ebersbach\_Khan\_poster\_IP-min-1  
File name: Ebersbach\_Khan\_poster\_IP-min-1.pdf  
File size: 645 KB

**Presenters Page Video Location**

Above Text

**Your Email Address**

test@gmail.com

**Poster Facebook**

<https://www.facebook.com/>

**Poster Twitter**

<https://twitter.com/>

**Poster LinkedIn**

<https://in.linkedin.com/>

**Special Co-author**

[Save Changes](#)

On the Edit Poster Page, you will see designated boxes for the following:

Title - main title of your presentation

Content - description of your presentation

Poster Video Link - video URL

Poster PDF/Image - where you may add the file for your poster

Presenters Page Video Location - where you want the video to be displayed, whether above or below text

Email address

Social media accounts - Facebook, Twitter, LinkedIn

Meet Now Table - Enabling this feature allows attendees to engage in audio, video, or text chat with you on your poster page.

Select "Save Changes" at the bottom of the screen to save your changes.

## How to Record or Upload a Video

In order to get the Poster Video Link or the URL of the video, you must record or upload a video first. To do this, click on "Record Video" on the left-hand side of the page.

Here you will have an option to Record Screen or Upload a Video.

# Record Video

My Profile

Change Password

View My Profile

Edit Poster Page

**Record Video** ←

My Videos

## Record Your The RSGDREAM 2020 Virtual Poster Presentation

Please use either Chrome or Firefox browser to utilize this tool.

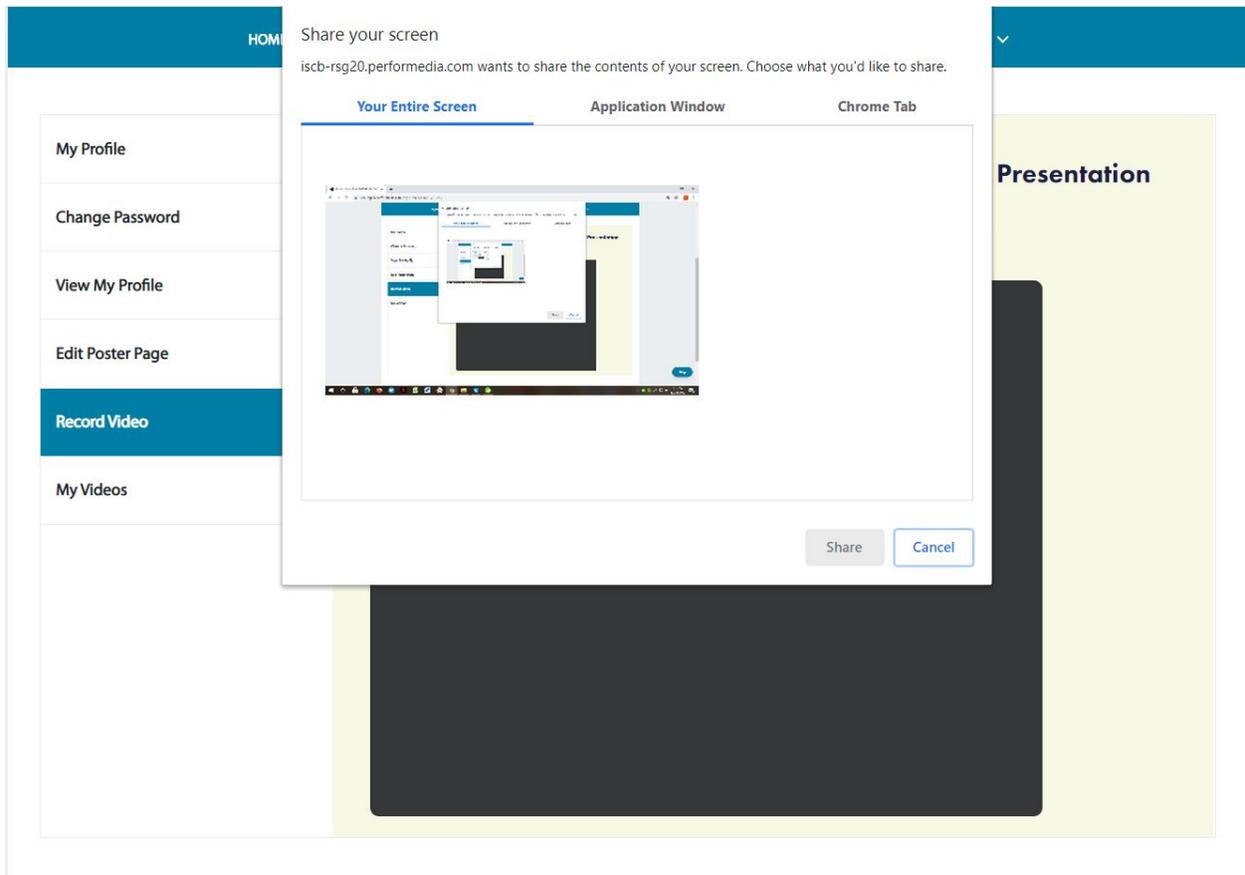
**Record Screen**  
Click above to record your screen presentation.

**Upload Video**  
Click above when you are ready to upload your presentation.

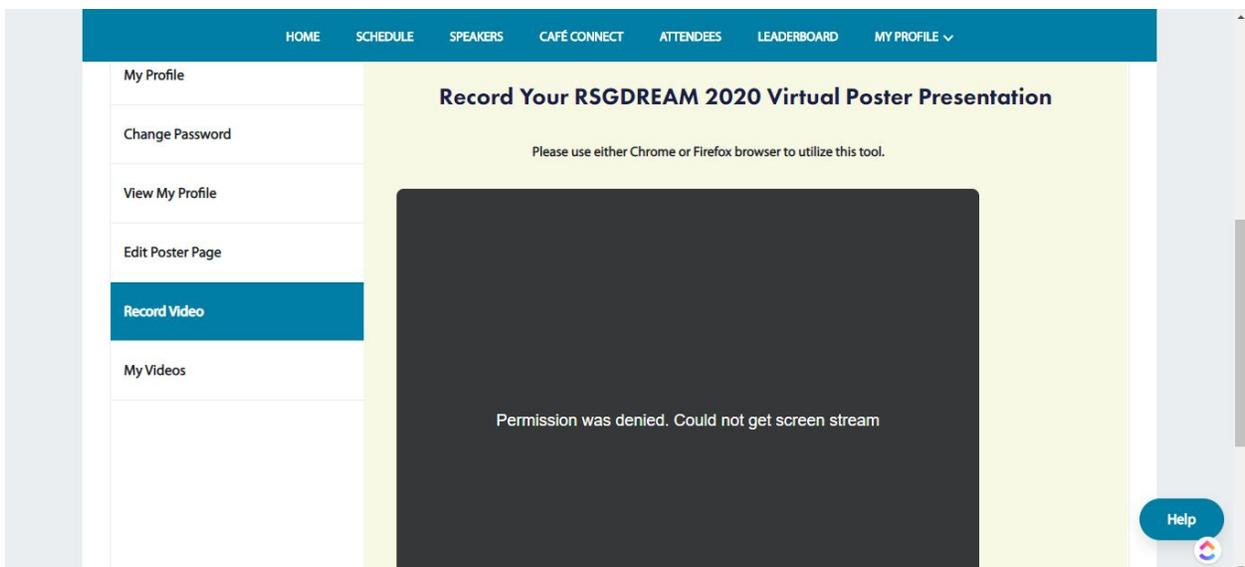
Powered by Pipe

Click on Record Screen if you want to record your screen presentation. Otherwise, click on Upload Video if you already have a video presentation ready.

When you click on Record Screen, it will open up a new page giving you the option on which screen you want to share.



Take note: It will ask you to allow the Screen sharing (default browser's alert will show up). If you denied the screen sharing, then it will display a "permission denied" screen as below. Refresh the page, and you can record the video by allowing the permission.

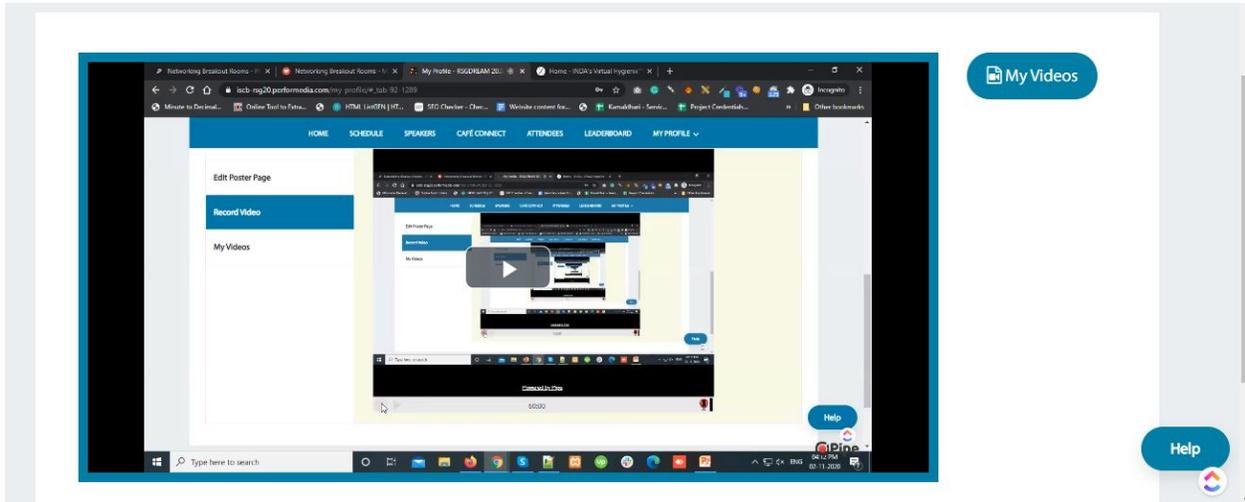


Once you're done recording or uploading your video, click on "My Videos" tab.

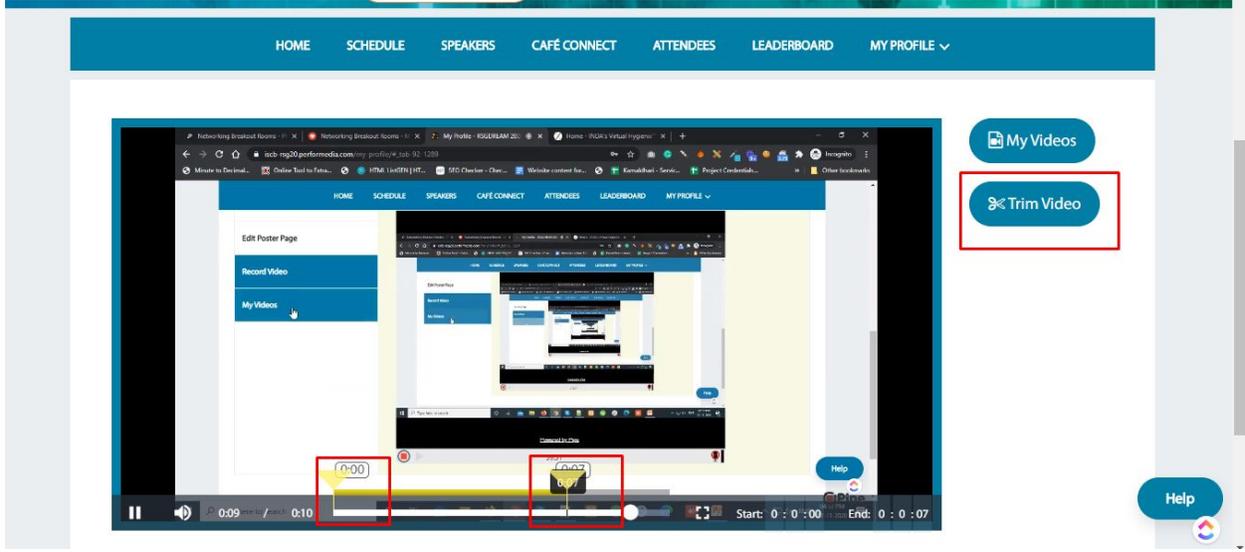
On the My Videos page is where you can edit, delete or publish your video.

## Viewing, editing, publishing your video

Here, you can edit the beginning or ending of your video with the trimming functionality. Start by clicking "Edit" on the upper left corner of your recording, and then clicking the "Play" button:



Once you play the video, you will see the tool (shown below) for trimming the video. After selecting where you'd like to trim the video, click "Trim Video", to complete the edit. The edit will save once you refresh the My Videos tab.

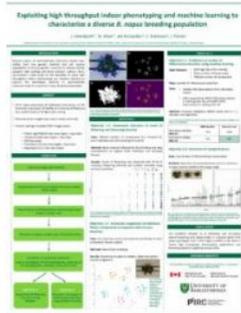


Back on the "My Videos" tab, select "Publish" on the video you would like to display. Note: "Publish" only works when your page is complete.

Once you have saved your page and published your video, return to the "Edit Poster Page" tab, and click on "View Page" to give you an idea on how your presentation and poster page look.

Please refer to the sample image below:

# Exploiting high throughput indoor phenotyping and machine learning to characterize a diverse *B. napus* breeding population



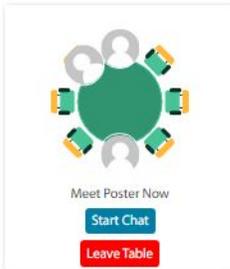
## Authors

### Presenter Demo 1

Performedia

Nazifa Khan  
Department Of Computer Science - University Of Saskatchewan - Saskatoon

Ian McQuillan  
Department Of Computer Science - University Of Saskatchewan - Saskatoon



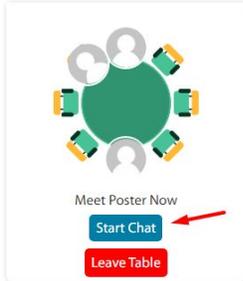
Phenotyping is considered a significant bottleneck impeding fast and efficient crop improvement needed to ensure sustainable food production for a growing world population faced with uncertain environmental challenges. Similar to many crops, Brassica napus, an internationally important oilseed crop, suffers from low genetic diversity and will require exploitation of diverse genetic resources to develop locally adapted, high yielding and stress resistant cultivars. Here, we present a pilot study on the feasibility of using high throughput indoor phenotyping and machine learning to capture the phenotypic diversity of agronomically important traits in a diverse *B. napus* breeding population. The experiment comprised 50 *B. napus* genotypes, grown and phenotyped in six replicates under two treatment conditions (control and drought) over 38 days at the LemnaTec Scanalyzer 3D facility at University of Nebraska. Using image processing of RGB and NIR images, we extracted growth traits such as plant height, width, and projected leaf area, and derived traits such as estimated biovolume and growth rates. In addition, we could approximate the number of flowers per plant per day and score relevant canopy traits (width, angle) by implementing a method for separating flower from leaf features. We employed decision tree machine learning to predict the number of inflorescence branches (98% accuracy), an important feature of canopy architecture in *B. napus*. Finally, we tested various feature combinations for prediction of drought stress, a complex trait which typically has to be empirically scored, and achieved 88% accuracy using the K-nearest neighbour algorithm. Our study demonstrates the usefulness of HTP and automated image processing for the rapid and effective characterization of agronomic trait diversity in *B. napus*, which will facilitate germplasm screening and future crop improvement efforts. Furthermore, our results underscore the value of machine learning for phenotyping studies, particularly for complex traits such as drought stress resistance.

Contact Me

# Chat with the Attendees

If you wish to chat with the attendees, you can also do so on this page. Just click on the “Start Chat” button you will find at the lower left corner of the page.

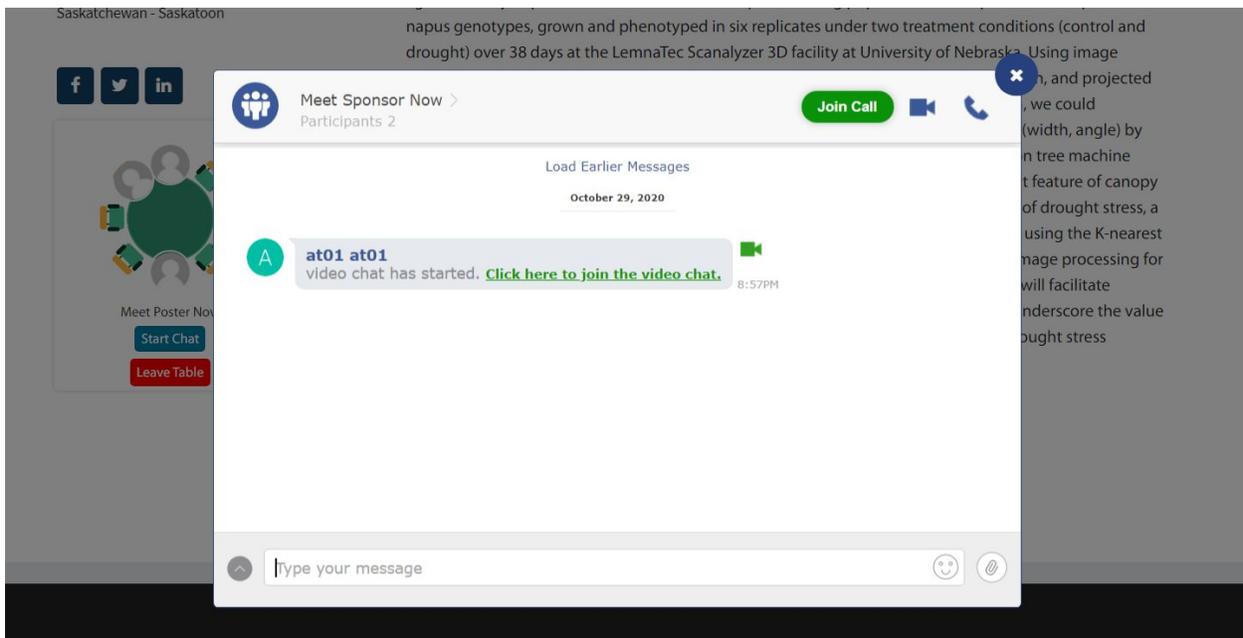
Saskatchewan - Saskatoon



agronomically important traits in a diverse *B. napus* breeding population. The experiment comprised 50 *B. napus* genotypes, grown and phenotyped in six replicates under two treatment conditions (control and drought) over 38 days at the LemnaTec Scanalyzer 3D facility at University of Nebraska. Using image processing of RGB and NIR images, we extracted growth traits such as plant height, width, and projected leaf area, and derived traits such as estimated biovolume and growth rates. In addition, we could approximate the number of flowers per plant per day and score relevant canopy traits (width, angle) by implementing a method for separating flower from leaf features. We employed decision tree machine learning to predict the number of inflorescence branches (98% accuracy), an important feature of canopy architecture in *B. napus*. Finally, we tested various feature combinations for prediction of drought stress, a complex trait which typically has to be empirically scored, and achieved 88% accuracy using the K-nearest neighbour algorithm. Our study demonstrates the usefulness of HTP and automated image processing for the rapid and effective characterization of agronomic trait diversity in *B. napus*, which will facilitate germplasm screening and future crop improvement efforts. Furthermore, our results underscore the value of machine learning for phenotyping studies, particularly for complex traits such as drought stress resistance.



A new window will pop-up when you click on Start Chat.



Importante note:

Make sure to check the Meet Now Table at the bottom part of the Edit Poster Page to enable or disable the chat feature.

Meet Now Table

- Enable
- Disable

Co-author section



Co-author

[Add Row](#)

Save Changes