

NRC Publications Archive Archives des publications du CNRC

Developing novel rust disease resistance approaches in wheat

Panwar, Vinay; Fobert, Pierre; Bakkeren, Guus; McCallum, Brent; Jordan, Mark

For the publisher's version, please access the DOI link below./ Pour consulter la version de l'éditeur, utilisez le lien DOI ci-dessous.

<https://doi.org/10.4224/23001958>

NRC Publications Archive Record / Notice des Archives des publications du CNRC :

<https://nrc-publications.canada.ca/eng/view/object/?id=e2320037-b97b-4d24-9303-821275b7b666>

<https://publications-cnrc.canada.ca/fra/voir/objet/?id=e2320037-b97b-4d24-9303-821275b7b66b>

Access and use of this website and the material on it are subject to the Terms and Conditions set forth at

<https://nrc-publications.canada.ca/eng/copyright>

READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE USING THIS WEBSITE.

L'accès à ce site Web et l'utilisation de son contenu sont assujettis aux conditions présentées dans le site

<https://publications-cnrc.canada.ca/fra/droits>

LISEZ CES CONDITIONS ATTENTIVEMENT AVANT D'UTILISER CE SITE WEB.

Questions? Contact the NRC Publications Archive team at

PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca. If you wish to email the authors directly, please see the first page of the publication for their contact information.

Vous avez des questions? Nous pouvons vous aider. Pour communiquer directement avec un auteur, consultez la première page de la revue dans laquelle son article a été publié afin de trouver ses coordonnées. Si vous n'arrivez pas à les repérer, communiquez avec nous à PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca.

Developing Novel Rust Disease Resistance Approaches in Wheat

Objective: Host-induced gene silencing technology for combating cereal rust diseases by targeting pathogenicity-associated factors in rust pathogens

Outputs thus far: Wheat was genetically transformed for enhanced tolerance to rust pathogens using expressed rust gene fragments as an effective disease control strategy

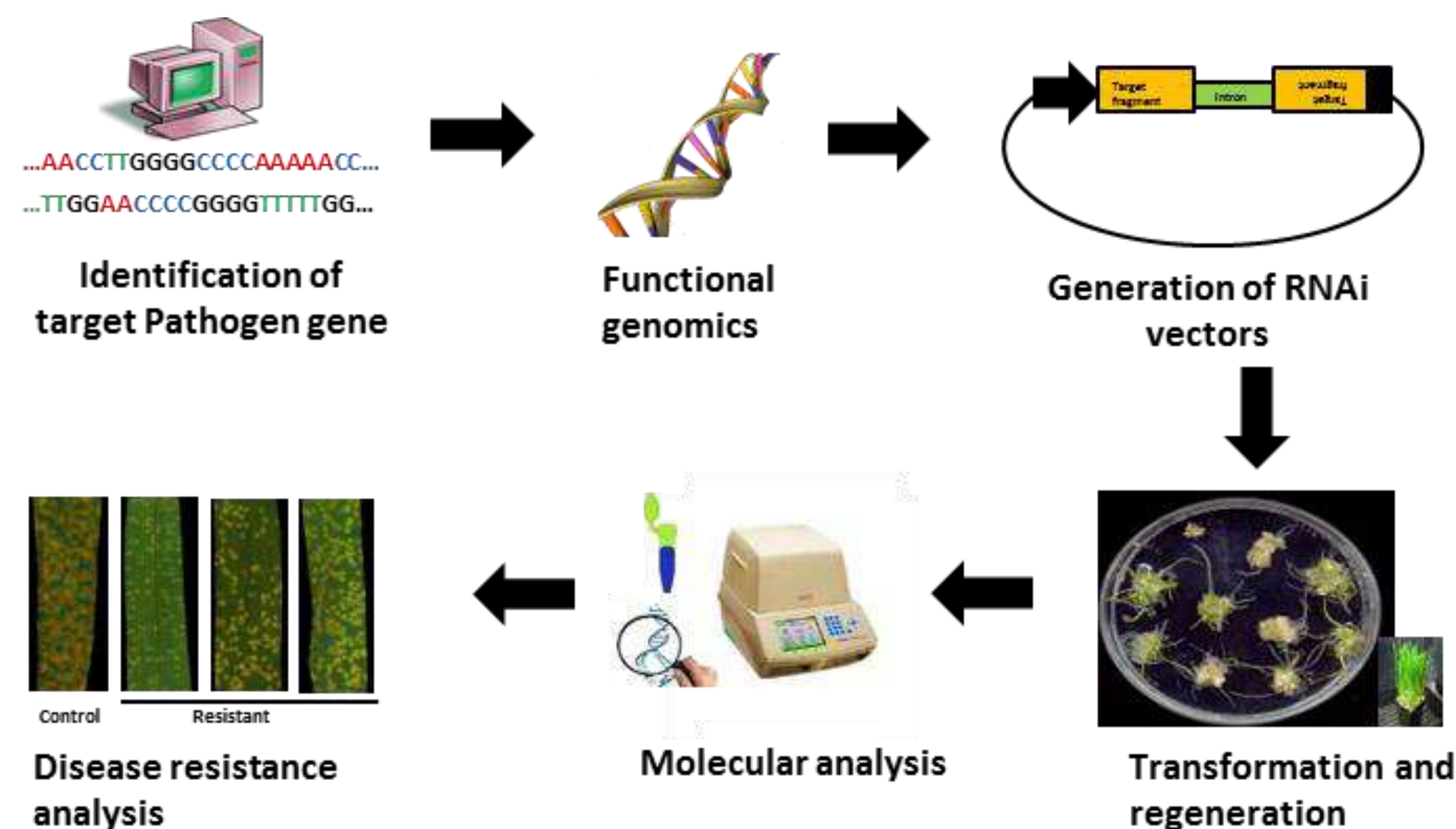
Impact: Increased variability and durability of resistance in cereal crops

Potential to reduce fungicide costs and their detrimental environmental impacts

Deployment path: Method training of personnel between the CWA and consortium partners

Delivery date: 2016-2017

Resources committed: ~\$500K over 4 years



Opportunity for collaboration: Development of marker-free wheat plants with durable rust disease resistance using the technology platform.

CWA Team: NRC: Vinay Panwar, Pierre Fobert
AAFC: Guus Bakkeren, Brent McCallum, Mark Jordan