Connecting diagnostic labs with a system for protocol sharing and version control

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Objective: To facilitate communication between diagnostic labs as well as the updating of protocols, a new diagnostic lab protocol management system has been launched. The system allows for version control to know what has changed between revisions, commenting on protocols between and within labs, listing protocols a lab is willing to test for in geographic areas, and services to integrate with a labs data management system.
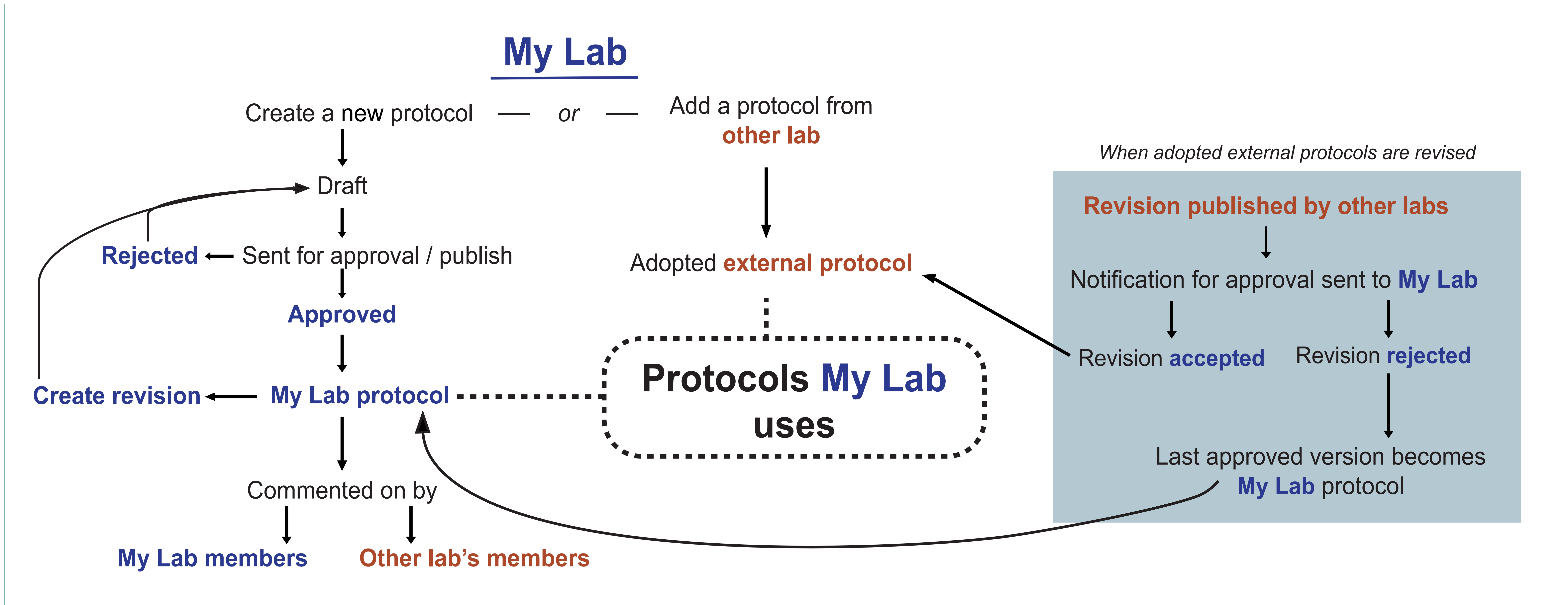

Introduction

- Diagnostic labs are the foundation for protecting agriculture from new pathogens and providing reliable information to direct effective pest management decisions. To date, there has been no formal system for sharing protocols between labs within the National Plant Diagnostic Network.

- While many labs are willing to share diagnostic procedures and resources like the online Diagnostician's Cookbook exist, the updating of diagnostic procedures and notifications of updates requires significant time and may not happen efficiently. This can lead to improvements not being relayed in a timely fashion and makes it difficult to compare what protocols are used by different diagnostic labs.

- A new system has been launched to facilitate communication between diagnostic labs as well as other groups providing testing protocols. All protocols published in the system are available for adoption by participating labs.

- As updates are published by the originating lab, all adopting groups are notified of the change and given the opportunity to accept the revisions or start maintaining their own version of the protocol.

- The system provides a forum for commenting on protocols between and within labs, public listing of protocols that a lab offers within a geographic area, and services to integrate with a lab's data management system.

Next Steps

- We are seeking feedback from diagnostician's as they use the system to improve its functionality and ensure it is compatible with their labs normal operations. We are also seeking to work with systems that may need to access this information such as Laboratory Information Management Systems to ensure efficient access.

- Through the USDA National Institute of Food and Agriculture (NIFA) Specialty Crop Research Initiative project, "Combating Rose Rosette Disease: Short Term and Long Term Approaches" (2014-51181-22644/SCRI) we are exploring ways to connect the protocols used in the lab with pest occurrence information. This is also providing new ways for us to look at occurrence data for pests.
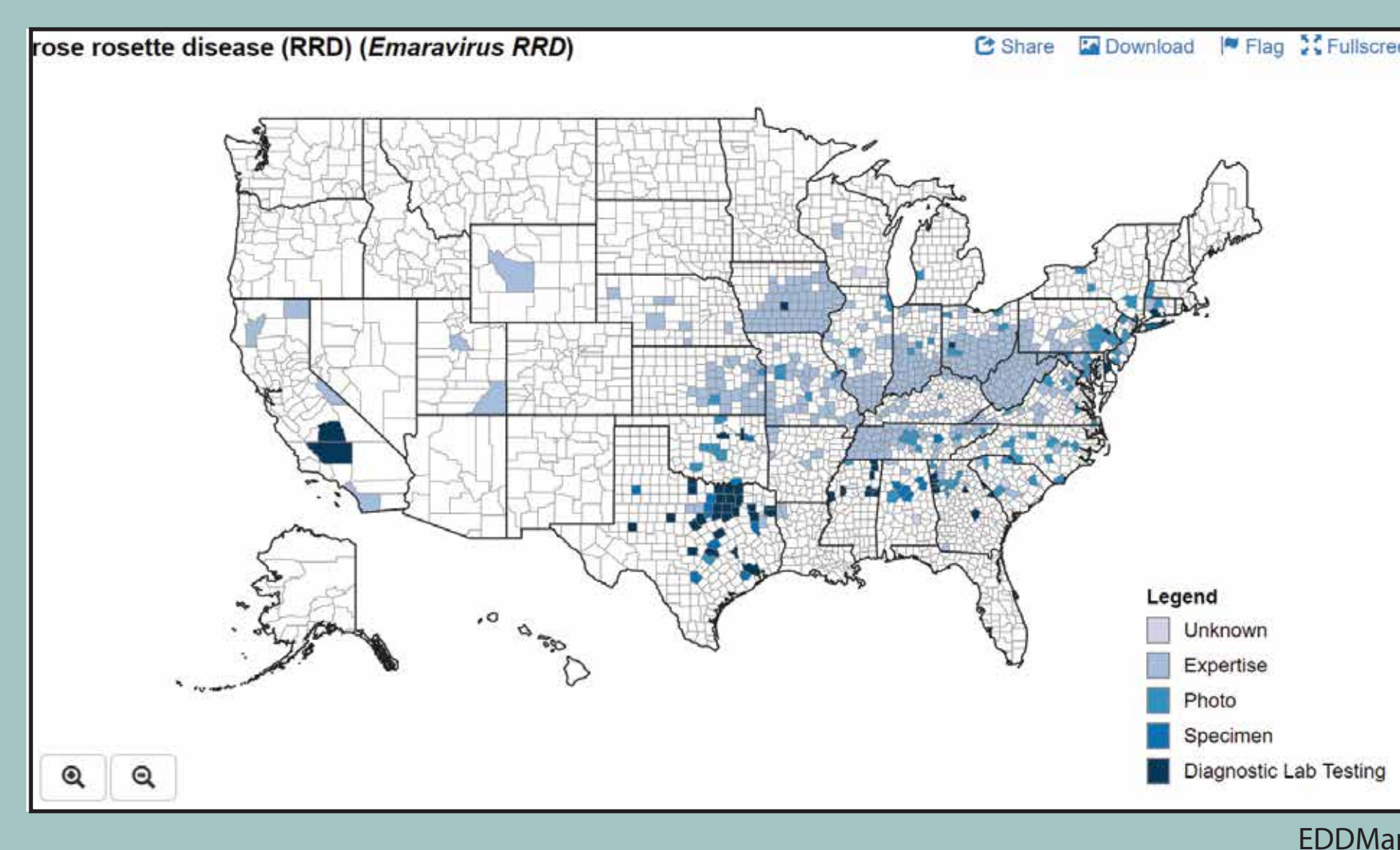
How to Join

- The protocol sharing system is open to any lab that is performing diagnostics or can act as an authority for publishing standard protocols to diagnostic labs. This includes National Plant Diagnostic Network labs, research labs, testing service labs, and working groups looking to improve resources for diagnosticians.

- If you have multiple locations – you will likely want to make multiple labs as each may have certain expertise AND if the lab chooses to list services that are available, the shipping address is likely to be different.

- To request a place for your lab, send the following information to laforest@uga.edu
  - Official lab name (keep in mind that with many states "The Plant Diagnostic lab" is not unique)
  - Shipping address
  - Mailing Address
  - Who should have access - Anyone you want to have access should create an account at www.eddmaps.org.
  - Do you have an approval chain – and if so, What are the roles and who is in them. One can always be added later.

Contact Information

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