

1783 Screening wild cotton seedlings for thrips resistance

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Screening was conducted to search for thrips resistance in the obsolete race stocks and other wild cottons maintained by the collections around the world. Methods were developed to screen cotton seedlings using wheat to rear thrips. Initial "tray test" style experiments were used to quickly eliminate susceptible accessions using leaf surface area as an indicator. Several accessions showed resistance. These cottons are currently being tested using the no-choice method. The testing is being conducted on an ongoing basis and methods are still being refined to speed up the process. At present, 198 accessions have been screened successfully. Several accessions have shown strong resistance in the initial testing and are now being tested using the no-choice method. No-choice will verify resistance and identify the mechanism of resistance. Accessions showing real resistance will be passed to the genetic engineer and breeder for further development. Without no-choice data, this work should be viewed as preliminary. As more testing is completed, more comprehensive results will be presented.