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### **Improving genetic diversity in wheat: development of NAM resource**

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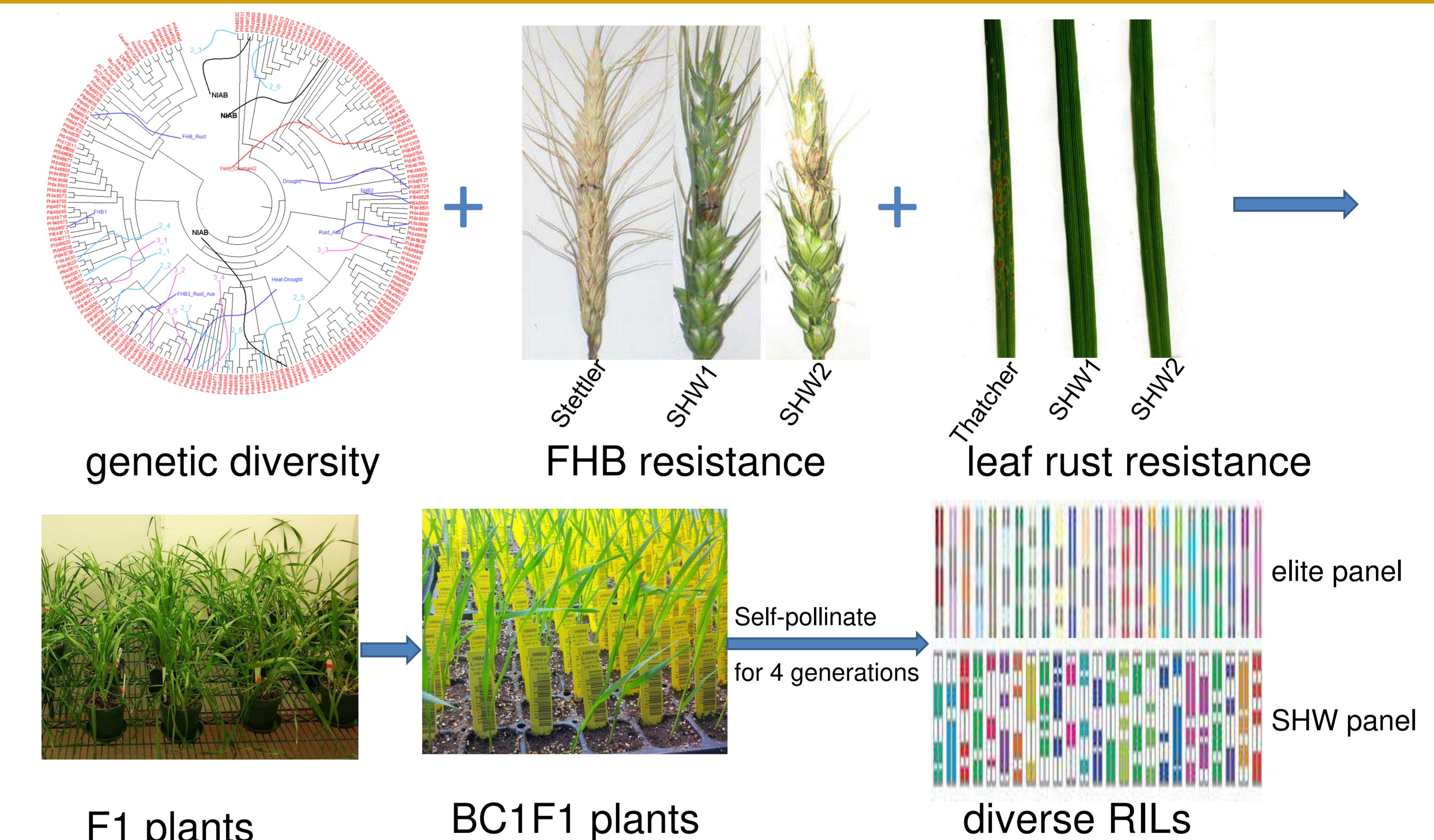
## Improving Genetic Diversity in Wheat: Development of NAM Resources

**Objective:** To enrich wheat gene pools with novel genetic variation for improvement of wheat performance in response to disease and climate change

**Outputs thus far:** A next generation genetic platform is being established using nested association mapping (NAM) approach. Stettler is used as a common parent and crossed with 25 elite lines and 25 diverse synthetic hexaploid wheat (SHW) donors. A total of 4,700 recombinant inbred lines (RILs) are being developed.

**Impact:** Valuable resource for 1) identifying diagnostic marker for priority traits; 2) enhancing the diversity of elite germplasms with performance improvement

**Deployment path:** Establishment of NAM platform as a key resource for CWA partners and wheat research community



**Delivery date:** 2017

**Resources committed:** ~990K over 5 years

**Opportunity for collaboration:** Breeding for sustainable wheat improvement

**CWA Team:** NRC: Andrew Sharpe, Bianyun Yu, Wentao Zhang, Peng Gao, Christine Sidebottom, Prabhath Lokuruge, Carling Clarke, Dustin Cram, Pierre Fobert  
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