About: There are different ways to accelerate line development and with that increase the rate of genetic improvement in crop cultivars. Off season nurseries for example allow for more than one generation per year. The introduction of DH technology in the self-pollinated major cereal species wheat and barley, and also now in maize and canola, can be considered as a major breakthrough in reducing the breeding cycle time.

However, in several major crop species including soybean and sorghum, protocols for development of DH lines are not available or are inefficient. Despite of the strong interest of breeding companies in novel or improved DH systems, there is a need for public research and public-private partnerships in this area, which is target of the planned NSF I/UCRC Competence Center for Doubled Haploid Research (CeDHR).

Research areas:
(1) Molecular and cellular processes involved in haploid formation
(2) DH technology in novel crops
(3) Automated procedures
(4) Novel strategies with regard to breeding, genetic resources, and experimental populations

For more information: Additional information on membership terms for interested industry partners can be found on our website: http://cbec.gdcb.iastate.edu/cedhr/

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