AMES, IOWA USDA-ARS and Iowa State University

Maize genetics outreach to American Indians

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Maize is an excellent vehicle for plant genomics outreach to those American Indian tribes that use and appreciate it nutritionally, culturally, and spiritually. Thanks to NSF funds and USDA-ARS in-kind resources, we mentored four to six Native American Indian students for eight weeks during each of the summer 2006 and 2007 field seasons, and plan to continue offering the program for at least three more years. All students worked at the USDA-ARS North Central Regional Plant Introduction Station in Ames, lowa learning about plant genetic resource conservation. Half of the students also worked on developing molecular markers for Abnormal Chromosome 10 in our lab and three worked with the MaizeGDB team to create project data storage and presentation solutions. The project website can be viewed at http://www.lawrencelab.org/Outreach/. Note that maize was not a central element in all tribes' cultures, so this sort of project may not be useful for outreach to tribes who do not revere maize! We encourage others to pursue plant genomics outreach to American Indians and invite inquiries on how to get started.



Caption: Ray Lee (Navajo medicine man) and Lula Jackson (Ray's wife) led a corn pollen blessing during the summer of 2006 at the NCRPIS. Pictured (left to right) are: (front) Carolyn Lawrence, (middle) Lula Jackson (Navajo), Regina Sanchez (Navajo), Ray Lee (Navajo), Sharon Garfield (Navajo), (back) Alexandra Volker (Cherokee), Nathan Etsitty (Navajo), Titus Harrison (Navajo), Mark Widrlechner, Lisa Burk, and Von Mark Cruz. (For full color, see p. 32.)