## Incidence of Introgression Between Cultivated Alfalfa and Wild Relatives in Northwestern Kazakhstan. (C08greene173749-Poster)

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## Abstract:

Central Asia is considered the primary center of origin for alfalfa and has a rich diversity of taxa in the Medicago sativa Complex. An exploration was carried out in 2000 to collect germplasm of wild relatives of alfalfa in Northwestern Kazakhstan. Russian scientists had previously proposed areas within the targeted region as in situ gene reserves of wild alfalfa in the 1960s and 1970s. An objective of the collecting trip was to survey these areas to determine if they continued to retain alfalfa genetic diversity. After 30-40 years, two out of three of the areas supported diverse populations of wild alfalfa. AFLP markers were used to determine whether gene transfer had occurred between alfalfa cultivated historically in the areas proposed as gene reserves, and current wild alfalfa populations. The ideal in situ site would show no incidence of introgression. Six wild accessions of Medicago sativa subsp. varia were compared with the following historic varieties: Dolanskaya 2, Priaralskaia, Tibetskaia, Dikorastuscaja and Semirechenskaya. Levels of introgression, diversity of wild relatives, and suitability of individual sites as in situ reserves will be discussed.

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## **Presentation Information:**

Presentation Date: Monday, November 11, 2002 Presentation Time: 4:00-6:00 pm Poster Board Number: 1308

Keywords: Introgression, in situ conservation, genetic resources, AFLP's