

sources of maize from Tablacillo race of Mexico. Yield low to moderate due to short ear lengths and low kernel row numbers. Plants tall, ears high. Root lodging common due to plant height, although stalk quality good for exotic population. Colored and colorless cobs, yellow kernels common but white and purple kernels present. Average maturity 112 days. Undergone 28 cycles of mass selection for adaptation. Adaptive traits include flowering date, plant height, and plant health.

PI 595375. *Zea mays* L. ssp. *mays*

Breeding. Population. EXOTIC COMPOSITE. Developed in United States. Pedigree - Synthesized by intermating 11 populations of cornbelt by exotic germplasm. Populations included CB*Mexican(C2), CB*Caribe(C2), CB*Brazilian(C2), CB*Cuzco(C2), CB*Early Tropical(C2), Gaspé*Columbian(C5), Krug*Tablacillo(C10), Kenya Composite, Bangkok population, Conico, Latente, and CB*Peruvian. CB is abbreviation for Cornbelt Composite which contains five open-pollinated varieties Hayes Golden, Barber Reid, Krug, Lancaster, and Golden Republic. CB constituted less than one-half of original Exot. Yield very good relative to other populations of this type. Many ears have kernels of outstanding quality. Plant height medium tall to tall, ear placement medium to high. Good stalk strength and plant health. Cobs primarily red, kernels yellow although some color variation exists. Inbreeding within has produced several attractive lines of average height and normal flowering. Lines yield well in hybrid combination. Average maturity approximately 114 days. Improved by 13 cycles of modified ear-to-row half-sib family selection. Lines don't fall into any specific heterotic group as expected based on genetic diversity.

PI 595376. *Zea mays* L. ssp. *mays*

Breeding. Population. HAYS GOLDEN*44. Developed in United States. Pedigree - Formed by crossing version of Hays Golden, improved by 13 cycles of modified ear-to-row half-sib family selection, to Mo44. Cross to improve standability, with resulting population one-half Mo44 and one-half Hays Golden. Improved by 2 cycles of modified ear-to-row half-sib family selection. Population contains largely Reid or Midland germplasm placing it in Stiff Stalk heterotic group. Mo44 combines well with Stiff Stalk and non-Stiff Stalk genotypes. Average maturity 114 days. Yield good, standability improved by cross to Mo44 relative to immediate Hays Golden progenitor. Plant height tall, ear placement high, but traits not as pronounced as in other Hays Golden populations. Cob red, kernels yellow.

PI 595377. *Zea mays* L. ssp. *mays*

Breeding. Population. NEBRASKA ROOTWORM SYNTHETIC. Developed in United States. Pedigree - Developed by intermating 12 inbred lines and 2 Mexican populations with large roots or good root regrowth after damage. Inbreds included N8A, N8B, N28, N38A, N124, A251, A625, B57, B69, Mo22, SD10, CI21E. Two populations were Corn Belt*Zapalote and Zapalote Syn17. Improved by approximately 8 cycles of mass selection for maturity and plant appearance. Further improved by two cycles of reciprocal full-sib selection with Nebraska Drought Synthetic as opposing population. Average maturity 110 to 112 days. Contains largely Reid germplasm, although lines selfed from it perform equally well when crossed to either heterotic pattern. Yield moderate. Ears medium, cobs red, and grain yellow. Plant and ear heights medium to medium tall. Stalk