New Wheat Line Breaks Yield Barrier
By Jack Keyser

Third World farmers call it Rusape in Zimbabwe, Numidie in Algeria, Dashen in Ethiopia, Glennson in Mexico, Pak 81 in Pakistan, Olintepeque in Guatemala, and by more than a dozen other names in as many additional developing countries.

Wheat breeders at the Mexico-based International Maize and Wheat Improvement Center (CIMMYT) call it "Veery -- a spring bread wheat for many environments."

Developed at CIMMYT to serve a wide range of environments and harsh growing conditions, the Veery wheat line produces up to 10 percent more grain than the "miracle" varieties that sparked off the Green Revolution of the 1970s. Moreover, Veery wheats, now grown on more than 4 million hectares (10 million acres) worldwide, are efficient users of fertilizer and water resources and show good resistance to the diseases and environmental stresses often found in developing countries.

At a conference on agricultural research in Washington, Donald Winkelmann, CIMMYT director general said, "This outstanding spring wheat resulted from an initial cross of a Russian winter wheat, Kavkaz, and a Mexican spring wheat, Buho. After further crossing and seven generations of testing at two sites in Mexico, the line was given a breeding name, "Veery," and was distributed worldwide by CIMMYT for multilocation testing."

The new Veery line has been used to produce locally adapted lines in over 25 countries on five continents. According to CIMMYT scientists, the area planted to Veery-based varieties will increase dramatically as seed becomes more readily available to farmers.

Many of the key traits, in addition to yield, that have made the Veery wheats so popular with farmers can be traced to the winter wheat parent. These include improved resistance to two diseases of wheat, stripe rust and powdery mildew, as well as some resistance to septoria diseases and leaf rust and superior tolerance to environmental stresses such as cold, excessive heat, and drought.

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Other important traits of the Veery wheats are their efficient use of scarce inputs in low-input environments and their ability to respond exceptionally well as production conditions improve.

CIMMYT is one of 16 international centers supported by the Consultative Group on International Agricultural Research (CGIAR), an informal association of over 40 governments, international organizations, and private foundations that was established in 1971 to support a system of agricultural research and development around the world.