

MANILA, Aug 10, 2006 (AFP) - Researchers in the Philippines and the United States have isolated a gene that will enable rice to survive flooding, it was announced Thursday.

The breakthrough -- which could improve harvests for 70 million of the world's poorest people -- was announced in a statement from the International Rice Research Institute (IRRI) in Los Banos outside Manila.

The statement said a team of researchers at IRRI and the University of California had isolated the gene that will enable the cereal to survive while completely submerged.

"The discovery allows for the development of new rice varieties that can withstand flooding, thus overcoming one of agriculture's oldest challenges and offering relief to millions of poor rice farmers around the world," the statement said.

"Although rice thrives in standing water, like all crops it will die if completely submerged for more than a few days.

"The development and cultivation of the new varieties are expected to increase food security for 70 million of the world's poorest people," the statement added.

Pamela Ronald, a rice geneticist, said: "Globally, rice is the most important food for humans.

"Each year millions of small farmers in the poorest areas of the world lose their entire crops to flooding," she said.

"Our research team anticipates that these newly developed rice varieties will help ensure a more dependable food supply for poor farmers and their families."

Rice is the primary food for more than three billion people around the world, according to IRRI. Some 25 percent of the global rice crop is grown in lowland plots that are prone to seasonal flooding. These floods are extremely unpredictable and may occur at any growth stage of the rice crop. Although rice is the only cereal crop that can withstand submergence at all, most rice varieties will die if fully submerged for too long.

"During any given year, yield losses resulting from flooding in these lowland areas may range from 10 percent to total destruction, depending on the water depth, age of the plant and how long the plants are submerged," IRRI said.

Annual crop loss due to flooding has been estimated at more than one billion dollars.