

HOMCHOLASIT: A PROMISING RICE CULTIVAR FOR A FLOOD-PRONE AREA

With 300,000 rai (48,000 ha) of land devoted to rice plantation, Phatthalung is a major rice producing province of southern Thailand. However, the long rainy season which can last for 8 months – typical weather of southern Thailand – does not make it easy for rice cultivation.

In 2014, flash flood-tolerant Homcholasit rice was introduced to farmers in Chai Buri Sub-district of Phatthalung through the distribution of seed by Chai Phattana Foundation. Two farmers, Sommart Maneerat and Thawee Butsaraphon, were responsible for seed production. Each allocated a 5-rai (0.8 ha) plot to produce Homcholasit seed in 2017 for distributing to members of Ban Kok Ching Community Enterprise – a community enterprise established by farmers planting Homcholasit in Ban Kok Ching Village in Chai Buri. The enterprise, headed by Preecha Onrak, has 21 members. “Most of our members grow Homcholasit for household consumption,” Preecha explains Homcholasit cultivation practice in his community. “Farmers who produce extra will sell their surplus. There is some growing interest among farmers in seed production.” The enterprise purchases Homcholasit paddy from its members at the price of 8,000 baht/ton.

After the milling, the rice is sold at 30 baht/kg for a normal packaging or 50 baht/kg in a vacuum packaging. Fresh seed is purchased at 10 baht/kg and sold at 18 baht/kg. Profit from selling Homcholasit grain and seed is paid back to members in the form of dividend.

Prior to Homcholasit, members of the enterprise grew assorted varieties, including Phitsanulok, Chainat, Hom Pathum, as well as indigenous varieties like Lebno and Sangyod. After tasting Homcholasit, farmers knew that they have a winner because of the distinct softness and fragrance that other varieties pale in comparison. Homcholasit has gained popularity among consumers in this area and the vicinity. Seed has been purchased by farmers in the nearby province of Songkhla. In addition to flash-flood tolerance, Homcholasit is resistant to insect pest, as it was able to survive the insect outbreak whereas other varieties could not.





In the first year (2017/2018), members grew Homcholasit along with other varieties. However, in 2018/2019 cropping season, all 130-rai (20.8 ha) rice field owned by the enterprise members grow only Homcholasit. This flood-tolerant variety is also cultivated on the 100-rai (16 ha) land in the nearby village.

Sopa Mukkata, one of the enterprise members, attests that cultivation of Homcholasit does not need special attention compared to any other varieties but the result is far more rewarding. “The variety recovers well after 20-day flood, provides the yield of 800 kg/rai (5 tons/ha) and commands higher price.”

Thawee produces Homcholasit seed twice a year, from January to April and from May to August. Her seed has 98% germination rate,



according to the quality testing administered by Phatthalung Rice Seed Center. “Seed quality and farm management are two key factors determining crop productivity,” Thawee, an experienced seed farmer, underlines the importance of high quality seed.

Though it has been only 2 years since they started planting Homcholasit, farmers in this village are satisfied with the result and will continue to grow Homcholasit with support of new knowledge and technologies supplied by NSTDA.

Developed by research team of NSTDA, Kasetsart University and the Rice Department, Homcholasit, a cross between KDML105 and IR57514, was developed with a quality for flash flooding tolerance and non-photoperiod sensitivity using marker-assisted selection technique. It can survive under the water for 2-3 weeks after the occurrence of flash flood. Homcholasit can be planted for grains during and outside the regular cropping season, providing yield of 800 kg/rai (5 tons/ha).