

# A Super Napier from Thailand

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***SUPER NAPIER** — The Department of Livestock Development in Thailand has come out with a new hybrid napier that is so outstanding, it might as well be called Super Napier. This was developed in six years by Dr. Krailas Kiyothong, an animal nutritionist and plant breeder, by crossing *Pennisetum purpureum* (the ordinary napier grass) and *Pennisetum glaucum* better known as Pearl Millet. This new napier grows very fast. The 59-days-old plants in photo are already about 10 feet tall. One hectare of this Super Napier can produce 500 tons, harvested four times in one year. That's enough to feed 50 dairy cattle for one year. Photo shows from left: Danilo V. Fausto of the Talavera Dairy Cooperative in Nueva Ecija, Dr. Krailas Kiyothong who developed the hybrid napier, Zac B. Sarian and Norachong Deepraman, the farmer who is growing the Super Napier on 20 hectares for sale to dairy farmers.*

A new hybrid napier is the talk of the town among dairy farmers in Thailand. The Department of Livestock Development (DLD) in that country calls it Pakchong 1 napier but it might as well be called Super Napier.

Why? Because it is so outstanding. It is very high-yielding. One rai, a common measurement of land in Thailand (40 meters x 40 meters or 1,600 square meters), can yield 20 tons of fresh herbage per cutting. And since four harvests can be made in one year, that means one rai can produce 80 tons. That also means that one hectare is capable of producing 500 tons in one year, which is enough to feed 50 dairy cows for 12 months.

To pursue it further, 16 hectares could produce enough grass to feed 800 dairy cattle in one year! And that has quite excited members of a Philippine delegation that observed the latest trends in dairying in Thailand recently. These included Dr. Libertado Cruz of the Philippine Carabao Center, Danilo V. Fausto of the Talavera Dairy Cooperative, Juan P. Lozano who is chairman of the Batangas Dairy Cooperative, Administrator Grace Cenas of the National Dairy Authority, and two media persons, including the editor of this page.



Aside from being a high yielder, the Super Napier is claimed to contain 16-18 percent crude protein, which is considered very high. This is very important, especially for dairy animals that have to be nourished adequately in order to produce more milk.

The Super Napier was developed by Dr. Krailas Kiyothong, an animal nutritionist and plant breeder from the Department of Livestock Development in Pakchong, Nakhon Ratchasima province in northeastern Thailand. Dr. Kiyothong crossed the ordinary napier, *Pennisetum purpureum*, and Pearl Millet which is botanically called *Pennisetum glaucum*. Several years earlier, we were able to see another cross of napier and Pearl Millet in India but this Indian hybrid is not as outstanding as the one developed in Thailand. The Indian version has a much lower growth habit whereas the Thai counterpart grows very tall. In fact, the 59-days old plants that we saw in Pakchong were easily 10 feet tall.

The beauty about the Super Napier is that it could be ratooned. Which means that once established in the field, the plant regrows after each cutting. Harvesting could be as often as every 45 to 48 days but in the case of the farmer who grows it commercially in Pakchong, he harvests his crop every 60 to 70 days. With good management, the Super Napier could be ratooned for eight years. Or even for 30 years under optimum growing conditions, according to Dr. Kiyothong.

The Super Napier will grow well under many locations. But it will perform best in soils that are rich in organic matter. Dr. Kiyothong says that it is resistant to drought so it could be grown in many areas in the Philippines, including in the Ilocos where there is a distinct wet and dry season.

Two-node cuttings or setts are used for planting. These are planted either by following the system used in planting cassava or in planting sugarcane. In the system for cassava, the setts are placed several inches apart whereas in the sugarcane system, the setts are placed in the furrows without any gap.

Dr. Kiyothong notes that the system used in planting sugarcane produces plants with bigger stems or canes. After the first cutting, which is three months after planting, the stems are cut at ground level. Within a short time, a lot of tillers will come out, especially when the plantation is well fertilized and irrigated.

A number of smart entrepreneurs have recognized the profit potential in growing the Super Napier for sale to the dairy farmers. In Nakhon Ratchasima province alone, there are about 20 farmers who are producing the Super Napier for sale.

One of them is 58-year-old Narongchai Deepraman who has planted 20 hectares to this new forage crop. Narongchai used to raise dairy animals but when the Super Napier was released two years ago, he decided to concentrate on forage production. Today, he harvests an average of 20 tons of fresh herbage. He sells this to members of the dairy cooperative at 1.50 bath per kilo (about P2 in Philippine money). Which means he grosses about 30,000 baht everyday.

His biggest expense is on harvesting. He pays each harvester 600 baht per ton. The DLD, however, is taking the initiative to look for a harvesting machine that could significantly reduce the cost of harvesting.

Despite the high cost of manual harvesting, however, growing the Super Napier for sale is still very profitable. That is why Narongchai is planning to buy 30 hectares more to expand his production.

Meantime, livestock raisers from Malaysia have been buying their planting materials of Super Napier. The Filipino stakeholders, however, may not be far behind. They have already placed their own orders for planting materials.



**Agri Plain Talk**

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