

From 17 to 30kg milk per cow

Jahangir Tareen has big plans for his dairy farm in Pakistan. He wants to expand to 1,000 cows and almost double the production per cow. He uses Dutch genetics for this purpose.

The dairy farm J K Dairies (Pvt) Ltd is located in the middle of Pakistan, on the eastern side of the town of Rahim Yar Khan. There is lots of construction activity going on. The owner Jahangir Tareen wants to take a big step forward. Herewith he is capitalizing on the increased demand for dairy products. He would like to milk 1,000 cows that produce on average thirty kg per day. At the moment that average is seventeen kg. In order to achieve this goal he uses foreign genetics. In addition, an improvement to the housing system will also help. New barns will be built, featuring flexible stall dividers. Sand is used as bedding. A drip irrigation system keeps the cows wet to cool them down, the entire year. Presently, the dairy farm has 783 milking cows as well as 213 bred heifers. An enthusiastic management team, led by the New Zealand couple Neville (61) and Jacqui Legg (56), runs the dairy. Within a few years they want to bring the farm to a higher level. Dr. Waseem and dr. Erwanto, two veterinarians from Indonesia, are assisting them. Together with the other employees they quickly want to turn this dairy into an outstanding and modern operation. The use of foreign genetics will form an important part of this effort.

Crossbred blood

At first J K Dairies imported cows from Australia four years ago. Most of these were crosses based on breeds like HF and Jersey. The first year the cows were bred to crossbreds again. However, the results were not what they had envisaged. They therefore made the decision to start breeding with purebred, herd-book dairy genetics, which can perform well under various circumstances. However, Manager Neville does want to preserve crossbred blood in the herd, in order to give the herd sufficient resistance against the extremely high temperatures and the high humidity in the summer.

The choice mostly fell on semen from Dutch bulls. They now have beautiful heifers, daughters of Paramount, Olympic, Sherman, Valley, Manders Marius, Fortune, Parra, and Tyson, as well as from the New Zealand bull Top Deck. This genetic improvement should result in two-year-olds that easily produce 7,000kg of milk, and in their 2nd and 3rd lactations increase to 8,500kg.

Low cell count

Current milk production is 17.2kg milk per day with 4.6% fat and 3.6% protein. Thanks to the high percentages the milk price currently amounts to 46 Rupees (more than 37 eurocents) per kg. The low plate and cell counts are remarkable. The milk has a

plate count of only 4,000 cells/ml and the cell count is below 200,000 cells/ml. As a result the prevalence of mastitis is low. Only in summer and during wet periods with lots of rain the number of cases of mastitis (coli mastitis) increases. Neville Legg attributes that



The New Zealand couple Neville (61) and Jacqui Legg (56), runs the dairy

mostly to feeding. "When the feeding is good, ninety percent of the problems are solved." He is right, many problems like fertility, displaced abomasums, and feet problems are related to feeding problems. The ration for the high producers consists of 22kg fresh chop sorghum, 22kg fresh chop corn (stalk + cob), and 40kg fresh alfalfa. Supplemented with a maximum of 6kg concentrates these cows produce 26kg of milk per day. The cows look shining. That

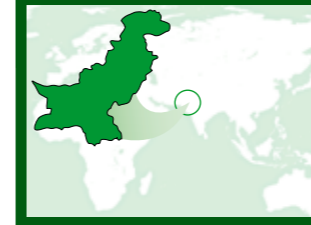


New barns are built. Sand is used as bedding

Manager Neville Legg wants to preserve crossbred blood in the herd, in order to give the herd sufficient resistance against the extremely high temperatures and the high humidity



Pakistan



was quite different two years ago, when the cows often had a pale brown color. "This was due to a shortage of minerals, and the calves and cows mostly suffered from a shortage of copper," explains Jacqui Legg. Today they add copper sulfate to the drinking water and the calves receive copper boluses, which has solved the problem. The good consistency of the manure is conclusive evidence.

Molasses for feed

Owner Jahangir Tareen also has a sugar factory processing sugar cane from 30,000 acres (more than 13,500ha). The dairy farm benefits by having access to sugar molasses. The sweet product works well in two ways. Firstly, addition of molasses to the ration improves the quality and the palatability of the feed. Secondly, in a wet alfalfa silage molasses helps to develop bacteria that enhance proper conservation. Around the farm are hundreds of hectares of emaciated land. The soil consists of dusty sand, which is a result of wrong fertilizing methods. Continuous use of fertilizer instead of organic manure has resulted in the level of organic matter dropping to almost zero. The dairy is trying to turn this situation around. After leveling an area of land, the crop residues of the sugar cane are now being plowed in. Subsequent irrigation cleans the salty layer. As a result organic life returns little by little. Seeding alfalfa supplies the soil with nitrogen. After two years of intense cultivation, the soil prepared in this way now produces no less than three wonderful corn crops of 36,000 kg product each in one season. |

Big Winner



Ariena 22 (s. Big Winner): 2.07 305 days 7,968kg milk 4.31% fat and 3.32% protein

What's in a name? Big Winner does not do credit to part of his name as he certainly does not sire very big progeny. His daughters are moderate in size, strongly built with good capacity. However he is a winner as his progeny stays in the herds, are late maturing and extremely suitable to grassland grazing. Their average size helps them to a long herd life while big cows as is generally known have a shorter productive life. Winner's key to breed more durable cows is to be found in his origin. His pedigree seems in conflict with the theory that with shorter generation intervals better genetic products are to be obtained.

High lifetime production in three generations is the most characteristic feature of Winner's family. His dam (Ex90), his granddam (Ex90) and his grandgranddam (VG89) were all impressive lifetime producers with resp. 74,000kg (5,3% fat and 3,9% protein), 110,000kg and 139,000kg. Old cows can be super bull dams! From such a family one may expect better than average lifetime producers. Late maturing is often connected with a long herd life. This late maturing quality, that Winner's daughters are getting better with age, is one of the strong points of his transmission. The second lactation of the older one of his 274 test period daughters show not only an enormous increase

in production but also an extreme high percentage still present in the herds. Another quality of this sire is his completely different bloodline. His sire is the very reliable milktransmitter Art Acres Win 395. As a son of Winchester he certainly brings fresh blood into the population. So does his dam's sire Lucky Leo as a son of the famous French transmitter Ugela Bell. In difference with his sire Big Winner is first of all a sire for components both fat and protein. Functional traits with very good scores for calving ease, milking speed and fertility make him a very attractive partner for cows needing more strength and staying power. He is indeed a sire to provide grassland grazing herds with the profitable no-nonsense cows required to maintain an economical enterprise.

Production index

| rpty | kg milk | % fat | % prot. | kg fat | kg prot. | Inet* | longevity | NVI | cell counts | calf ease | fertility |
|------|---------|-------|---------|--------|----------|-------|-----------|------|-------------|-----------|-----------|
| 83 | +142 | +0.43 | +0.16 | +42 | +18 | €96 | +340 | +170 | 97 | 102 | 101 |

*milk money in euros

Conformation

| | | |
|-------------|-----|----------------------------------|
| frame | 101 | <div style="width: 100%;"></div> |
| robustness | 105 | <div style="width: 105%;"></div> |
| udder | 105 | <div style="width: 105%;"></div> |
| legs & feet | 107 | <div style="width: 107%;"></div> |
| total score | 107 | <div style="width: 107%;"></div> |