Maize under film matures earlier

This spring maize under film experienced a huge advance on regularly grown maize. Under film the maize didn't suffer from the long period of cold. But is the situation still the same at the end of the season?

Dairy farmer Arno Droogh from Boskoop is lucky. This year he grew maize under film for the first time and last week the maize was already mature enough to be harvested. "It is mature much earlier than the rest of the maize in the region. That maize is not yet ready to be harvested." An earlier harvest date was a very important reason for Droogh to start growing maize under film. He grows maize on a very low peat soil, which can get very wet during autumn. Last week Droogh visited a trial site with maize under film in Montfoort. On this field 8 identical varieties had been sown under film and without film. "The lowest four leaves of the plant were already brown and the cobs were yellow. When touching the cob sown without film the moist still runs from the pits." He is pretty satisfied with the maize grown under film even though he experienced problems with weed control. He also thinks the film is pretty expensive. According to the prices of the producer Samco, the film costs around the $\in 250$, per hectare.

Hein-Willem Leeraar is the representative in The Netherlands of Samco, the producer of the film and the machines. He explains why the maize under film is mature so much earlier. "The maize under film did not suffer from the cold spring. Because of that the plants were able to continue growing and starting to produce the cob in July and August. The maize benefits from the huge amount of sunlight and thus photosynthesis, which is beneficial for the maturing process of the cob.

Stagnation

Regularly grown maize on the contrary experienced a cold period in the spring for about two to three weeks. Therefore it stagnated and only started to mature at the end of August and in September. And according to Leeraar the maize won't be finished until October. The two to three weeks stagnation in the spring are felt now and is not beneficial for the plants. "In September and October less photosynthesis occurs. Therefore we see poor white yellowish cobs. They are filled, but the process of producing starch goes on very slowly". And this costs the farmer nutritional value. Leeraar expects that much of the regularly grown maize will contain around the 300 gram starch. "Growers will harvest expensive hay. On first sight the regular maize seems to be doing fine, but if you look more precisely you can also see that the stems are very thin. This is caused by the extreme fast growth when the weather started to be warm. The plant puts all his energy into the growth process. Next to a small amount of starch, the growers will also not harvest huge tons", he expects.

According to Leeraar, the usage of the film can be seen as an insurance. Farmers can fairly assume that they will harvest at least 370, 380 grams of starch. Maize is a subtropical plant and suffers from the cold, wet and dry circumstances. Also harvesting problems do occur regularly. "In 4 of the 5 years you would be happy to have been growing maize under film. And that one year you'd rather have not done it, because the weather circumstances were good. Roelof de Jong from Sibrandabuorren is participating in Maismeetnet. His maize contained 34% dry matter and this was by far the highest of all contestants. "This is our fourth year growing maize under film. Our starch has always been higher than 400 grams. We will see if this will also be the case this year. However, I would love to see some more tons."