D-DAY – SEEDING 'SEASPRAY' SEASHORE PASPALUM

By Arne van Amerongen

In the second of two articles, golf project manager Arne van Amerongen describes preparations for the golf-build of a new course at The Korineum G&CC – the first 18-hole course in North Cyprus and the first seeded course in the world where Seashore Paspalum was used from tee to green.

It was time to start reseeding the golf course. The teams were briefed and more than 40 people were well aware that we had only one week to seed the entire site.

All the calibrations had been made for the seeding equipment, machinery and attachments. The staff arrived at the site at 4.30am and seeding began at 5am. Critically, there was just enough seed to seed all areas, which meant no room for mistakes or for rainfall washouts.

The procedure followed by the workforce was as follows:

Group A – seeded the greens and green surrounds
Group B – seeded the tees and surrounds
Group C – applied hydro mulch to the greens

Four workers – top-dressed with sand on the tees and surrounds, green surrounds, fairways and semi-roughs

We used six drop spreaders for the greens, tees and surrounds and one tractor with an attachment for the fairways and semi-roughs.

Seeding the greens

Seeding the greens in three different directions with the drop spreaders is shown in Picture 1. Note the red paint used to indicate the size and form of the green.

After seeding the greens, we had to put hydro mulch onto the green surface to obtain better establishment, as shown in Picture 2.

The Penn Mulch was used to keep the seed and green surface moist. The quantity of mulch applied was 1.5 bags per 150m2 and 500ltrs of water per 150m2.

Picture 1

Picture 2: Spraying mulch mixed with water.

Seeding the tees and surrounds

Seeding the tees and surrounds was done in two directions with the drop spreaders. After seeding the tees, we used a spring rake attached to a bunker machine to bring the seed into the tee surface better.

In Picture 3 you can see that seeding the surrounds was carried out in two directions with the drop spreaders. Also note the white line (gypsum) employed for marking the edge of the semi-rough areas.

Picture 3: Seeding greens and tees surrounds.

Seeding the fairways and semi-roughs

The seeding of these areas was done with an Einbock agricultural seeder from Austria. It worked perfectly for the lines behind the seeder, mixing the dead grass and the seeded paspalum together while maintaining contact with the topsoil. In my opinion, this was the best way to seed on an established grass surface. After the seeding, carried out in only one direction, we did one more pass at 90 degrees just to scratch the surface only, without seeding, one more time.

Picture 4: Seeding the fairways and semi-roughs.

Top-dressing the seeded areas

Picture 5 shows top-dressing of the fairways and semi-roughs using a Rink Top Dresser.

Picture 5: Top-dressing fairways' semi-rough.

After working from dawn to dusk for a week, the team completed this incredible task. It was a fantastic effort, with an amazing team spirit displayed without which we could never have got the job done.

CUTTING AND MAINTAINING THE NEW TURF

Before we started cutting the grass we had to keep the seed moist, something that is very important in hot countries such as Cyprus.

We had to use an enormous amount of water. We used between 3200m^3 to 3500m^3 daily, which is exactly the same for germination of every kind of grass seed in areas like Cyprus – Bermuda, creeping bent, rye and fescues, etc.

After 25 days we could see some results. Then, after 58 days, we began to cut all areas, with starting cutting heights as follows: Greens 9mm, tees/aprons 13mm, fairways 15mm and semi-rough 32mm.

Maintenance for seashore paspalum is very similar to creeping bent. It is very sensitive and

Picture 6

Picture 7: Cutting greens without grass box.

does not recover well from scalping.

It is very important for the greens, tees and aprons that the cutting machines have smooth rollers.

We started collecting the clippings on the greens and tees after four weeks of cutting with no box.

For maintenance of the tees, approaches and greens, intensive grooming is needed when the grass surface is well established. The groomer height was the same as the bottom of the front roller.

During establishment, water requirements were decreasing to 1200m^3 a day. It was important to use fresh water in the growing-in stage, as paspalum cannot handle bad water quality during germination.

The final cutting heights were introduced when the golf course was in play. They were: Greens 4mm, tees/approaches 9mm, fairways 13mm and semi-roughs 32mm.

Top-dressing is the main issue with paspalum. Initially, this was carried out 'by hand' in four different directions, as can be seen in Picture 8 .

Later, when the green was more mature, two-and-a-half months after seeding, top-dressing was done with a Toro Workman 4300, which is shown here in Picture 9.

Picture 8

Picture 9

We didn't use salt water, but only desalinated water, for the golf course, because, as I can now reveal, paspalum requires less water for its full establishment. This desalinated water cost 1 dollar per m^3.

Therefore it soon becomes apparent that, if your daily water consumption is reduced by 1000m3, this results in savings of 1000 dollars a day. This will determine that paspalum is the right grass for Northern Cyprus in the long-term.

To conclude

Financial advantages of paspalum (prices calculated in Northern Cyprus, using fresh water):

Water savings and electricity, desalination and irrigation pumps($320.000)

Less chemicals, fungicides, insecticides ($25.000) Total ($345.000)

Financial disadvantages of paspalum (prices calculated in Northern Cyprus, using freshwater):

4 more staff employed because of high maintenance ($55.400)

Overseeding ryegrass: Grass seed ($35.000) Labour + Machinery ($32.000) Loss of green fees 1 month ($49.000)

Extra use of top-dressing, machinery repairs ($18.000)

Total $189.400

Therefore it can be seen that using paspalum results in yearly savings of around 150,000 dollars – and that this will ultimately bring the businessman to conclude that it makes financial sense to use it.

In my opinion, in the game of golf, seashore paspalum is a completely different ball game to cool season grass. Personally I prefer the cool season, but to be fair to seashore paspalum it does take some time to get used to.

Head Greenkeeper, Baris Uyaroglu, is now maintaining the seashore paspalum. After three years, my job has ended.

Picture 10: The fine new course.

About the author

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