

# STRONG AS IRON

## Regenerating Perennial Ryegrass

The image features a large, vibrant green lawn in the background, likely a golf course, with a central logo. The logo consists of the letters 'RPR' in a bold, yellow, serif font, with a stylized green grass plant and its roots to the right. Below 'RPR', the words 'REGENERATING' and 'Perennial Ryegrass' are written in a smaller, yellow, sans-serif font. In the foreground, a grid of dark grey metal rebar is laid out on a dark surface, suggesting a construction or agricultural application. The rebar is arranged in a grid pattern, with the bars intersecting at regular intervals. The overall scene is bright and clear, with a blue sky and green trees in the background.

**RPR**  
REGENERATING  
Perennial Ryegrass



**RPR**<sup>TM</sup>  
REGENERATING  
Perennial Ryegrass



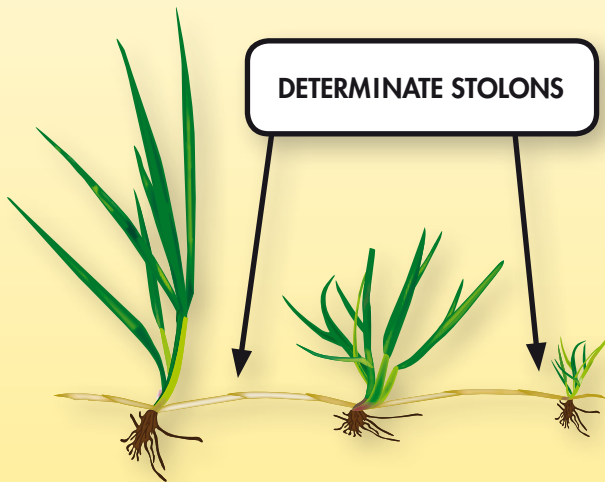
# Revolutionary technology: regenerating and the highest wear tolerance, even under close mowing regime.

## RPR technology inside!



RPR is a self-regenerating perennial ryegrass building determinate stolons. RPR is the first perennial ryegrass variety having this particular characteristic. RPR stands up

to heavy traffic while keeping its good looks. As a creeping perennial ryegrass, RPR outperforms traditional perennial ryegrass resulting in a regenerating perennial ryegrass with the highest wear tolerance and close mowing tolerance that is ideal for use in sports pitches and, when combined with fine-leaved perennial ryegrass, also for fairways and tees.



**T**he use of golf tees and fairways is steadily intensifying, resulting in greater damage. As standard tee and fairway mixes do not have the particular characteristic of regeneration, recovery will take too slowly. RPR does regenerate, creating strong tees and fairways that establish fast. Enhancing tee and fairway mixes with RPR technology leads to the combined advantages of speed and a strong sward with less damage and less risk of annual meadow grass establishing in the sward. Both mixes can be mown to 10 mm.

**Bar Extreme RPR** is a 100 % fine-leaved perennial ryegrass mix enhanced with RPR technology, characterised by extremely fast growth and great strength. It is most suitable for overseeding.

**Bar Intensive RPR** is a tee and fairway mix consisting of red fescue and fine-leaved perennial ryegrass enhanced with RPR technology. The red fescue gives this strong mix a high resistance to diseases and results in an extremely dense sward. Bar Intensive RPR can be used for both seeding and overseeding.

## Golf courses that are as strong as iron

Determinate stolons, sometimes called "runners", are growth shoots emerging from auxiliary buds at the base of each plant. When an RPR plant gets room when turf is damaged, determinate stolons will grow horizontally into the empty area and develop roots at its internodes. In fact RPR gives a natural network of stolons, like a kind of netting. This gives RPR the highest wear tolerance. Instead of separate plants, like traditional perennial rye grass, each RPR plant connects to other plants and into the top layer of the soil. The stolons in RPR form a natural network of horizontal shoots: a kind of netting in the sward that makes for excellent wear tolerance. Whereas a sward of traditional perennial ryegrass consists of individual grass plants, the grass plants of RPR are all linked to other plants and to the soil.

Thanks to the RPR technology, no turf will be easily kicked out by golf clubs, The turf quality also remains high, even under the heaviest duty and after being struck with great force. Tees and fairways consequently retain a dense sward on which golf can be played more intensively without divots.



The photo clearly shows how determinate stolons develop in RPR.

## A yearround dense sward

RPR brings strength and speed together in one specie. This has the advantage that all characteristics within the mixture are used at the same time. The grass plants quickly germinate and can be intensively used after the establishment of a dense sward that is suitable for golfing. Traditionally, strong species that are used for tees and fairways, such as smooth meadow grass (*Poa pratensis*), germinate more slowly than perennial ryegrass (*Lolium perenne*). In order to compensate this in many turf grass mixtures smooth meadow grass is combined with a faster perennial ryegrass. Despite the fast germination and establishment in these mixtures The wear tolerance of the tee or fairway will be insufficient. RPR technology enhances tee and fairway mixes by combining firmness and strength with speed of establishment and creating a sward that will remain dense throughout the year. And this results into the advantage that more rounds of golf can be played on an annual basis.



Here you see that a tussock of RPR has in one year's time acquired a circumference that is more than 50 % larger than that of common perennial ryegrass.

The following table shows the difference in effective growth between the new Bar Intensive RPR mix and Bar Fairway (containing smooth meadow grass). The RPR leads to earlier spring growth, resulting in golf courses that can be used earlier in the year too.

Bar Intensive RPR

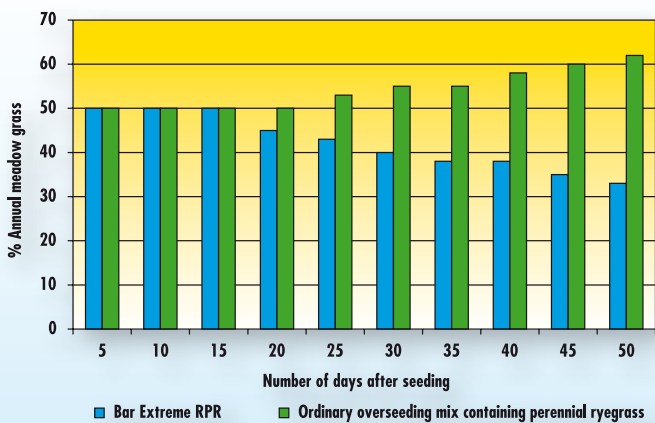
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Bar Fairway



## Preventing annual meadow grass

RPR is as strong as smooth meadow grass but establishes faster. This reduces the risk of the ingress of the undesired annual meadow grass (*Poa annua*) in your tee or fairway. And the advantage of this is a denser, better-rooting sward that needs less fertilizers and water. Trials have shown that the use of the new Bar Extreme RPR mix can decrease the growth of annual meadow grass by up to 20 % within two months after seeding (see the table).



Source: Barenbrug Research

Closer mowing isn't a problem for RPR either. Thanks to its combination with fine-leaved perennial ryegrasses the grass can be mown to 10 mm without in any way affecting the strength and regenerating capacity of the RPR.

## Specifications of the RPR technology

### Morphological characteristics

Growth habit	perennial with determinate stolons
Grass height	35 mm
Leaf width	similar to traditional
Leaf colour	mid green
Rooting depth	20 - 25 cm
Seeds per gram	700
Resistance to diseases	good
Risk of felt formation	very low
Rate of establishment	high
Growth rate	high

### Ambient conditions

pH	5.0 - 7.5
Soil type	any
Wear tolerance	excellent
Shade tolerance	good
Germination temperature	from 12 °C (soil temperature)
Establishment	fast

### Maintenance conditions

General maintenance requirement	average
Mowing height	from 10 mm
Mowing frequency	average
Water requirement	average
Nitrogen requirement	average

### Seeding

Seeding amount	20 - 25 g/m <sup>2</sup>
Overseeding amount	15 - 20 g/m <sup>2</sup>
Sowing depth	no deeper than 15 mm

Package contents	15 kg
------------------	-------



VS.

TRADITIONAL PERENNIAL RYEGRASS



## Bar Intensive RPR

Golf courses that are as strong as iron with a very dense sward

- Green
- Fairway
- Tee
- Rough



**RPR**  
REGENERATING  
Perennial Ryegrass

- Denser sward.
- High disease resistance.
- Suitable for seeding and overseeding.
- Less damage due to regenerating capacity.
- Higher playing intensity allowed.
- Green all year round.

### Composition

RPR	25 %
Fine-leaved perennial ryegrass	25 %
Common red fescue	25 %
Red fescue with fine stolons	25 %



### Specifications

- Establishment rate: high • Fertiliser requirement: normal
- Growth rate: high • Sowing density: 20 - 25 g/m<sup>2</sup>
- Mowing height: from 10 mm • 15 kg package

"We used RPR to rebuild a tee box last year and loved it. We have put a plan into place to overseed all our tees with RPR because of its great performance."

**Gary Lindsey,**  
Superintendent Vermillion Fairways Golf Course,  
Cook, Minnesota, USA.

"Some things you have to see with your own eyes to believe them. Creeping perennial ryegrass was one of those things for me – I am now a believer. Combining a creeping growth habit with the inherent capability to establish quickly and tolerate wear has the potential to take this grass species to a new level."

**Andy Newell,**  
Head of Turfgrass Biology, STRI.

## Bar Extreme RPR

Golf courses that are as strong as iron and establish extremely fast

- Green
- Fairway
- Tee
- Rough



**RPR**  
REGENERATING  
Perennial Ryegrass

- Very fast establishment .
- Less annual meadow grass (*Poa annua*) ingression.
- Most suitable for overseeding.
- Less damage due to regenerating capacity.
- Higher playing intensity allowed
- Green all year round.



### Composition

RPR	35 %
Fine-leaved perennial ryegrass	65 %

### Specifications

- Establishment rate: very high • Fertiliser requirement: high
- Growth rate: very high • Sowing density: 20 - 25 g/m<sup>2</sup>
- Mowing height: from 10 mm • 15 kg package

**BARENBRUG**  
Bar Intensive RPR

**BARENBRUG**  
Bar Extreme RPR



SEMENCES ZADEN SEMENTI TOP





## RPR technology inside!

RPR creates regenerating tees and fairways with the highest wear tolerance. RPR offers various practical advantages, such as:

- RPR** makes tees and fairways that are as strong as iron.
- RPR** quickly gives a dense sward.
- RPR** reduces ingress of annual meadow grass (*Poa annua*).
- RPR** allows more rounds of golf a year.
- RPR** gives better turf quality.
- RPR** has low weed ingress.

 **BARENBRUG**

*Great in Grass*

Barenbrug Holland BV • P.O. Box 1338 • 6501 BH Nijmegen • The Netherlands • Tel.: +31 (0)24 348 81 00 • E-mail: [export@barenbrug.nl](mailto:export@barenbrug.nl) • [www.barenbrug.com](http://www.barenbrug.com)