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FEBRUARY 2014

# THE FURROW



Customer service  
with a strategy

# INTERNATIONAL NOTES



GERMANY › PEASHRUBS AS WINDBREAK HEDGES

USA › NEMATODE-RESISTANT WHEAT

THE NETHERLANDS › DESERTS REFORESTED



## GERMANY

It's tough, looks after itself well, offers its neighbours protection against losses and can do much more. The Siberian peashrub (*Caragana arborescens*) is one of the lesser known plant species which performs well for the money invested. It withstands cold spells as well as dry phases; it can cope with salinisation and is wind-resistant. What's more, it binds nitrogen and grows well in poor soil, at both low and high pH values. The people living in the Taiga used to eat the pulses, take fibres from the bark and use the leaves as a dye. Like other pulses, the peashrub contains lectins, which can be poisonous in their raw state but are made safe by being cooked. Furthermore, the peashrub can be a honey plant for beekeepers and, for followers of Chinese medicine, an anti-breast cancer remedy and a treatment for gynaecological problems. Ning Tiao, as it is called in Chinese, also makes a good windbreak hedge. That's why *Caragana* is widespread in Canada and northern USA. People plant it to combat wind erosion and as a living privacy screen. In Europe, the peashrub is mainly used to populate green strips along motorways, slag heaps and wasteland says Jörg Eggert from the nursery of the same name in the town of Itzehoe in northern Germany. "Average amounts are exported to Scandinavia, but only a small number of plants are being bought by private customers as ground cover." A hundred metre hedge, he adds, costs €200 – 250. ■



## USA

Root-knot nematodes affect over 550 host plants; therefore it is difficult to get rid of this pest. The nematodes affect the water and nutrient uptake of their plant hosts. A team led by Prof. Valerie Williamson from the University of California has succeeded in cultivating a resistant wheat line. The source of this resistance is *Aegilops ventricosa*, a type of grass found mainly in southern Europe. In Lassik, the name of the first strain, the nematodes cannot complete their normal life cycle, and thus fewer nematodes affect the next culture type, often tomatoes in California, USA. So far, the team has approved three resistant wheat strains for use. In Australia, the Queensland agricultural research centre has already successfully cultivated five strains of wheat that are resistant to *Pratylenchus nematodes*. ■



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## THE NETHERLANDS

Pieter Hoff wondered for a long time why individual trees could survive and rejuvenate in many deserts even though it only rained there for a maximum of one week per year. Once the Dutch aid worker understood how the trees did it, he developed the "Waterboxx". With this simple but ingenious device 90 percent of artificially planted trees start to grow successfully. With the Waterboxx method, 15 litres of water are poured just one time into a round-shaped reservoir. A pipe is connected to the underside of this, through which the water seeps, drip by drip, into the soil. The shape of the cover ensures that additional condensation can be collected so that the seedlings always have enough moisture. The Waterboxx also slows down evaporation in the soil below, and the water stored in it ensures a favourable microclimate. ■