

European Community Directive 91/676 (Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. Official Gazette No. L375 of 31 December 1991).

Growers are required to draw up a fertilizer plan, the implementation of which is **mandatory** to secure permission to grow ornamental plants: this annual fertilizer plan must indicate the quantities of Nitrogen and Phosphorus used during the year by the nursery. From this data, the relevant authorities estimate the leaching of nutrients into surface waters.

The limits are set at 70kg of N/hectare and 10kg of P/hectare. The estimate is calculated on the basis of ongoing tests carried out by the government at test centres on the leaching percentage of various CRFs (Controlled Release Fertilizers). On average, with Osmocote Exact, leaching values of 8-11 kg/hectare of N and 2 kg/hectare of P are achieved compared with around 100 kg/hectare and 40 kg/hectare of P of Pg-mix + liquid feeding using water soluble fertilizers.

In the Netherlands, growers who do not draw up a fertilizer plan must recycle the water. UK growers may also be required to follow this system soon especially in Nitrate Restricted Zones.

In practical terms, this means the compulsory installation of a collection tank with a minimum capacity of 1,200 m³ per hectare of surface area: unthinkable in areas where concentration of production is high.



Leaching percentage of N and P

POT DIAMETER	Osmocote Exact 12-14 m		Osmocote Exact 3/4, 5/6, 8/9 m,		Other CRF		Water solubles 100%,	PG-mix
	P	N	P	N	P	N	N+P	N+P
9-11 cm	4%	6%	7%	12%	23%	28%	50%	70%
13-15 cm	3%	5%	6%	10%	17%	23%	45%	60%
17-21 cm	2%	4%	5%	8%	12%	18%	40%	50%

In the early months of 1990, Scotts began to conduct research to demonstrate the potential for environmental protection using controlled release fertilizers. At the start, leaching tests were carried out at Scotts' official research centres (Presikaaf) and by various growers. As early as late 1993, the Dutch government decided to reduce leached nitrogen and phosphorus levels by changing the growing practices of floriculture and nursery growers. The huge investments needed to resolve this problem led the government, growers and Scotts' technical division to establish the "fertilizer plan" cultivation concession system which is still in use today and updated continuously. The same concessions could be achieved in the UK.

Products do exist to limit leaching and Scotts has made this its priority in recent years. The use of Scotts controlled release fertilizer products undoubtedly has benefits. This table above clearly shows how the use of Osmocote Exact is good for the environment while at the same time appealing to economic factors. Indeed, the nutrients go where they are needed – to the plants and not to the ground water.

USE OSMOCOTE EXACT & PROTECT THE ENVIRONMENT



growing success