

Situation on Rapeseed GMO's in the Netherlands

Theo SAAT

D.J. Van der Have B.V., 4410-AA Rilland (Netherlands)

Genetically modified oilseed rape plants were, like in many countries, among the first to be produced and field tested in the Netherlands. A range of characters has been introduced into *Brassica napus* by a number of laboratories, e.g. markers, male sterility, resistances to biotic and abiotic stresses, medicinal proteins, feed and food quality, herbicide resistance and quality traits, etc. Few traits have been tested in Dutch field trials, and by one company only. Many laboratories merely use oilseed rape as a model crop for evaluations under greenhouse conditions. Breeding companies prefer to perform their field trials abroad, in the major growing regions. As a result, of the 55 Dutch permits issued before August 1995, only 5 involve oilseed rape (Bionieuws 14-01-95 p 4-5). Not only the number, the size of the field trials too is comparatively small. During the first field trial in 1991, buds of GMO's and of reference plants alike had to be removed before flowering. For practical reasons the trial therefore included not more than 80 plants, of which 13 were modified by the introduction of marker genes. Since 1991, plants harbouring herbicide resistance, a modified carbohydrate metabolism and /or marker genes have been

tested in the field. In contrast to most genetically modified crops tested in the Netherlands, these trials remain restricted to one location and do not extend 100 square meters annually. Even with such trials of only limited size, the possibility of (trans)gene flow to wild relatives cannot be completely ruled out. However, even with a crop like oilseed rape, small scale introductions into the environment most likely are reversible. In the course of events, the authorities have dropped most of the special restrictions, like for instance preventing the plants from flowering. Yet, all parties involved agree that GMOs of a crop like oilseed rape require thoughtful consideration and keep acting accordingly.

The traits introduced so far are mostly of a rather agronomical nature. Varieties that produce special raw materials have low priority. Unless manufacturers develop a large demand for special oils and offer a substantial bonus to growers, breeders will be unable to skim off a sufficient return on the required investment. In the near future, the relative lack of interest from industry in these new technologies is expected to remain mutual.