## 2. Is breeding necessary for organic farming?

Yes, organic farming is constantly developing and it needs new, suitable varieties. However, organic farming has its own legislation and rules about suitable breeding for organic farming. For example, the crossing and selection technique is suitable but the genetic modification technique is not (see also Question 8). There are both technical aspects and associated social, legal and economic aspects linked to modern breeding that pose questions and that do not fit in with the values of organic farming, such as patenting (see also Section 6).

## Background

Breeding for organic farming is done on only a limited scale. So organic farmers often use varieties that have been bred and selected for conventional agriculture. Sometimes these varieties suit organic farming. But sometimes they do not, as in the case of varieties that cannot be grown without the use of chemical pesticides; these are not suitable for organic growers, see Fig 1.





## **Diversity of varieties endangered**

Jan Velema, founder of Vitalis Organic Seeds, once stated: 'Whereas at the beginning of the 20th century there were 100 lettuce breeders in Europe, now that figure has fallen to only five breeding companies'. This means a reduction from 100 pairs of growers' eyes to only five. When breeding companies are acquired or merged, the breeding programmes are merged and certain varieties are dropped. As a result the breeding programme is reduced and the breeding of small crops is threatened. Moreover, conventional seed companies do not always want to invest in varieties that are aimed specifically at a relatively small market such as organic farming.

## Organic farming is committed to a diverse range of robust varieties

Biodiversity is a condition for food security in the long term. And biodiversity is of crucial importance for organic farming. Organic farming cannot be dependent on conventional varieties that require chemical input so a wide diversity of robust varieties are required that fit in with diverse, local growing conditions. For this reason the organic sector wants to be actively involved in the breeding of robust varieties that suit organic farming and the demand from organic consumers.