

UNDERSOWING

Key points

- Undersowing (or oversowing) is the sowing of a secondary crop underneath the primary cash crop.
- Benefits of undersowing include having a short term break crop for grazing well established after the main arable crop (e.g., wheat) has been harvested.
- Establishing this second crop by undersowing can reduce the number of cultivations required, and therefore save tractor time and fuel.
- If drilled in conjunction with the final tine weeding, undersowing can reduce weed pressure as the undersown crop can establish where weeds may have.
- Disadvantages of undersowing have been reported. In a wet year, the undersown crop may be too green and vigorous to allow easy harvesting of the main crop. Also, establishment of the secondary crop may be poorer than if it had been drilled after harvest of the main crop. Crop yield may also be compromised by competition from the undersown crop.

Undersowing (also known as oversowing) is the sowing of a secondary crop underneath the primary cash crop. For instance, a cereal can be undersown with green feed or pasture species which should be well established by the time the cereal is harvested in mid to late summer.

Advantages of undersowing

Many farmers use this practice and in their experience undersowing has the following benefits:

- The second crop is much further ahead than it would be if you waited until the primary crop was harvested before sowing;
- Undersowing minimises the number of cultivations required, therefore saves fuel, tractor time and minimises the soil structure deterioration that comes with cultivation;
- By undersowing at the same time as tine weeding, weeds may be replaced with pasture species. A drill box mounted on the front of the tractor, and the tine weeder at the back, allows the tine weeder to cover the seed. Use of irrigation allows good establishment.

Many arable crops can be undersown. Crops that are commonly undersown are linseed, cereals, peas, and beans.

Ryegrass and clover

Short rotation ryegrasses and clovers are frequently used as the undersown species because they are quick to establish and the seed is relatively inexpensive. Triticale and mustard are also useful species which can also be undersown as short term

crops in between cash crops. Permanent pasture can be established under the final crop in the rotation.

Undersowing linseed – weed control benefits

As linseed is quite an open crop, undersowing helps with weed control. It can also be of great benefit to have an undersown cover crop in between successive crops of linseed to help replace nutrients and organic matter. (See Organic Updates 12 and 13 on cover crops.)

Undersowing peas

When peas have been undersown, the pea vine can be left in the paddock and sheep put in to graze – this will lift up the vine and allow the undersown species to get more light. When most of the pea vine is eaten, sheep should be removed and the undersown species allowed to grow. About six weeks later the pasture is ready to graze.

Disadvantages of undersowing

Some farmers report disadvantages to undersowing:

- In higher rainfall areas or in wet years, undersown crops can sometimes grow too well and be a problem at harvest. The green crop may not allow the main crop to dry out sufficiently and the green matter can block headers.
- Establishment of the undersown crop may be poorer than if it had been sown after the harvest of the main crop. The main crop's growth and yield can be compromised by competition from the undersown species.