

## Floating Row Covers

Row covers are flexible, semi-transparent materials used to enclose one or more rows of plants with the objective of increasing temperature, providing wind protection and excluding pest insects. There are two basic types:

- Supported row covers (using wire hoops)
- Lightweight floating row covers

Floating row covers are most often used to keep insects out and at the same time let air, moisture and light in. The crop provides support for the cover, which floats on top of the plants as they grow - thus the name! Examples of floating row covers are ReemayR and AgribonTM; check local garden centres and catalogues for sizes and availability.

The principle behind floating row covers is simple: they act as a physical barrier, preventing adult insects from landing on the crop to lay eggs. They are often used in organic production, particularly in vegetables, and they are an excellent way to reduce the need for insecticides. Some good examples of pests in Newfoundland which can be controlled with row covers are the cabbage maggot, the cabbage butterfly and the carrot rust



The pesky cabbage butterfly.

fly. The cover should be placed over the crop at transplanting. It may not be necessary to keep the row cover in place all season. The critical period varies with the crop and the pest and is just one more reason why knowing pest life history is a good idea. You should check under your row cover periodically to ensure there are no diseases or insect problems developing.

To use a floating row cover, simply unfold the fabric and place loosely over the seed or plant bed. The cover should be loose enough to allow for crop growth but not so loose that it can be damaged by our sometimes excessive winds! To secure the edges, use boards, pipes or rocks, or bury the edges in soil. You can help maintain your row cover by removing any obvious sharp rocks underneath. This will minimize the potential for the fabric to be torn by rubbing on the rocks. Floating row covers can be used with black plastic mulch to control weeds. Speaking of weeds, you may have to raise the edges to remove them, but replace the seal as soon as possible so pests don't get in.

It is essential to practice crop rotation when using row covers. The cabbage maggot, carrot rust fly and other insects, overwinter as pupae in the soil underneath their host plants. If you grow related plants in the same ground the following summer (for example cabbage one year, broccoli the next), and use row covers, the adult insects will emerge into essentially a little greenhouse you have created. Imagine what they will do in that sheltered environment. To them it's paradise! Of course there are many reasons for practicing crop rotation, this is but one.

Another critical point: if the crop requires insect pollination, you must remove the covers after flowering begins.

If removed with care, floating row covers can be stored and used for several years. Good luck!

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