autumn leaves falling…..

Now is the time to prepare your garden for winter. As you finish harvesting crops it is important not to leave the bare ground. Heavy rain can leach valuable nutrients and can erode soils. Also, incorporating organic matter into your soil at this time will make a huge difference to the crop you grow next year.

VEGETABLES

Sow outside

Broad beans can still be sown now to give an early spring crop. Also, some hardy varieties of peas, such as Felthan First and Meteor.

Plant outside

Garlic cloves can be planted. Varieties such as Thermidrome and Printantor seem to grow well in the UK.

Harvest

You could be harvesting the following: jerusalem artichokes, perpetual spinach, brussels sprouts, winter cabbage, savoy cabbage, red cabbage, carrots, cauliflower, celeriac, celery, chicory (non-forcing and forcing varieties), endive, kale, kohl rabi, leeks, lettuce, parsnip pumpkins, radish, salsify, scorzonera, spinach, swede, turnips.

FRUIT

Fruit Harvest

You could be picking apples, pears, autumn-fruiting raspberries

Fruit Planting and Pruning

- Plant rhubarb crowns
- Cut down canes of autumn-fruiting raspberries which have finished fruited. Burn them to prevent any fungal diseases from spreading.
- Prepare the ground for planting fruit bushes and trees. It is easiest to prepare the ground before it rains too heavily and the ground is too heavy to dig.

  You can also start planting bare-rooted fruit trees and bushes this month.
- Check that young trees are well supported with stakes and ties.
- Prune young apple and pear trees.

GENERAL TASKS

- As ground becomes vacant it should be dug over and manure incorporated. Manure incorporated now should be broken down by planting time next spring. Don't dig when the soil is too wet such that it sticks to your boots and fork.
- Cover bare ground with leaves, weed cloth, straw or similar.
- It is too late to plant most green manure crops except for

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Pesticide exposure now linked to diabetes

Pesticides such as DDT, and a number of other chemicals, are so persistent in our environment and in our bodies that every one of us carries low levels inside of us. Consequently it is very hard to study their health effects as there are no 'uncontaminated' people for comparison.

In a new study, a random sample of people from the general population was selected. Levels of some persistent chemical contaminants present in their blood plasma were measured, including some polychlorinated biphenyls and some pesticides (DDT, oxychlordane, trans-nonachlor, hexachlorobenzene and hexachlorocyclohexanes). The amount of glucose they had in their blood was also measured to assess whether they were suffering from diabetes.

The researchers found that diabetes was more than five times more common in people with higher levels of oxychlordane and trans-nonachlor (both related to the organochlorine insecticide chlordane) and of polychlorinated biphenyl 153. They also found that levels of diabetes were doubled in people with high levels of DDT-related chemicals in their blood. The study took into account other factors that could be related to diabetes such as age, body mass index, waist circumference, gender, ethnicity, and income.

These chemicals may not directly cause diabetes but may contribute by suppressing the immune system or causing some other indirect effect.

A Strong Dose-Response Relation Between Serum Concentrations of Persistent Organic Pollutants and Diabetes, Lee D-H et al, (2006) Diabetes Care 29:1638-1644.

winter rye. Green manures planted at the end of summer can now be incorporated into soil.

- Prepare a container for making leaf mould. Trace out a square on the ground (about 2 foot by 2 foot) and hammer four wooden posts into the ground, one in each corner of the square. Wrap chicken wire around the sides attaching the wire to the posts making a container. Fallen leaves can be collected and stored in this. After 18 months or two years they will have broken down to make leaf mould, an excellent soil supplement.
- Cover compost bins to keep the rain out and heat in.
- Reduce ventilation in the greenhouse.
- Insulate the greenhouse and worm bin.... try bubble wrap.
- Set up water butts to collect rain water from the rooves of greenhouses and sheds.
- Remove yellowing leaves from winter brassicas. These are not useful to the plant and will encourage botrytis to develop.
- Check stored crops removing any showing the first signs of rot.
- Make preparations for next year by ordering new seeds, repairing and cleaning out sheds and greenhouses.
- Protect the curds of cauliflowers to keep them white and delaying the time when they will open up by bending or tieing the inner leaves over them.
- Net brussels sprouts, broccoli and other winter brassicas to protect them from pigeon damage.

Downy Mildew

This is a fungal disease that causes yellow or discoloured areas on the upper leaf surfaces. Each of these areas corresponds to a slightly fuzzy greyish-white or purplish growth on the underside of leaves. It may spread to affect entire leaves. Younger plants are more sensitive and seedlings may be killed. It is often confused with powdery mildew which is distinct as it tends to cause a more powdery growth on the tops of leaves.

Downy mildew is caused by a range of related species of fungus. Most will only affect one particular plant species and will not spread to others. However, one or two downy mildew species affect whole plants families and, unfortunately for allotment gardeners, one of these (*Peronospora parasitica*) affects brassicas and related plants and weeds such as wallflower, stock, shepherds purse. Other species significant for allotment gardeners are *Peronospora destructor* (on onions), *Perenospora farinosa* f. sp. *spinaceae* (on spinach), *Peronospora viciae* (on pea), *Bremia lactuca* (on lettuce), and *Plasmopara viticola* (on grape).

Downy mildew likes mild, damp weather and humid conditions, and so, crops grown in greenhouses or in other protected areas are particularly vulnerable. Spores can spread on air currents or water splash. They germinate on wet leaf surfaces penetrating the leaf's cells. They will only grow on living tissue but thick-walled resting spores can be produced inside the plant and may survive in dead leaf debris.

Spread of downy mildew can be limited by

- Removing infected leaves immediately
- Improving air circulation around plant by increasing plant spacing and good weed control
- Increasing ventilation in greenhouses
- Avoiding overhead watering
- Growing resistant lettuce varieties, such as Avoncrisp, Avondefiance, Beatrice, Court, Debby, Lakeland, Musette, Plenty, Saladin
- Removing all debris at the end of the season

PESTICIDE ACTION NETWORK *UK*

Pesticide Action Network *UK* (PAN *UK*) is an independent non-profit organisation working nationally and globally with individuals and organisations who share our concerns. PAN *UK* projects enable us to work effectively towards specific targets to enable us to:

- Eliminate the hazards of pesticides
- Reduce dependence on pesticides
- Promote alternatives to pesticides

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