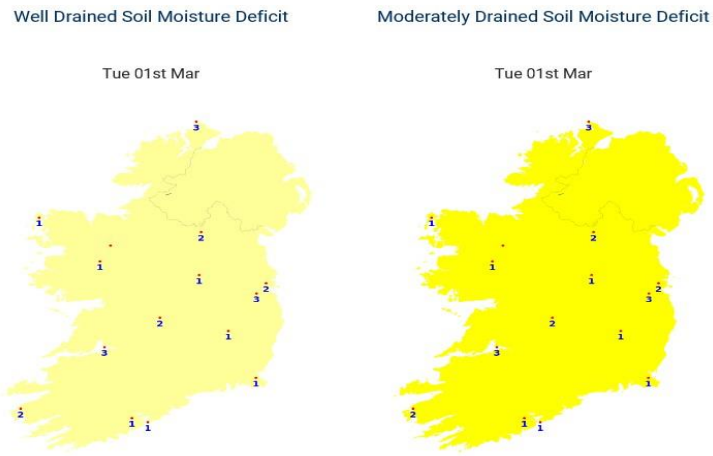
Earlies

The recent wet weather has slowed down the progress of planting early crops, after the dry January, soil moisture deficits have disappeared and many soils are now at field capacity. This will have an effect if you are trying to work those soils as the risk of soil structure damage and compaction is much higher now than a month ago.

Figure 1; Met Eireann soil moisture deficits March 1st 2022

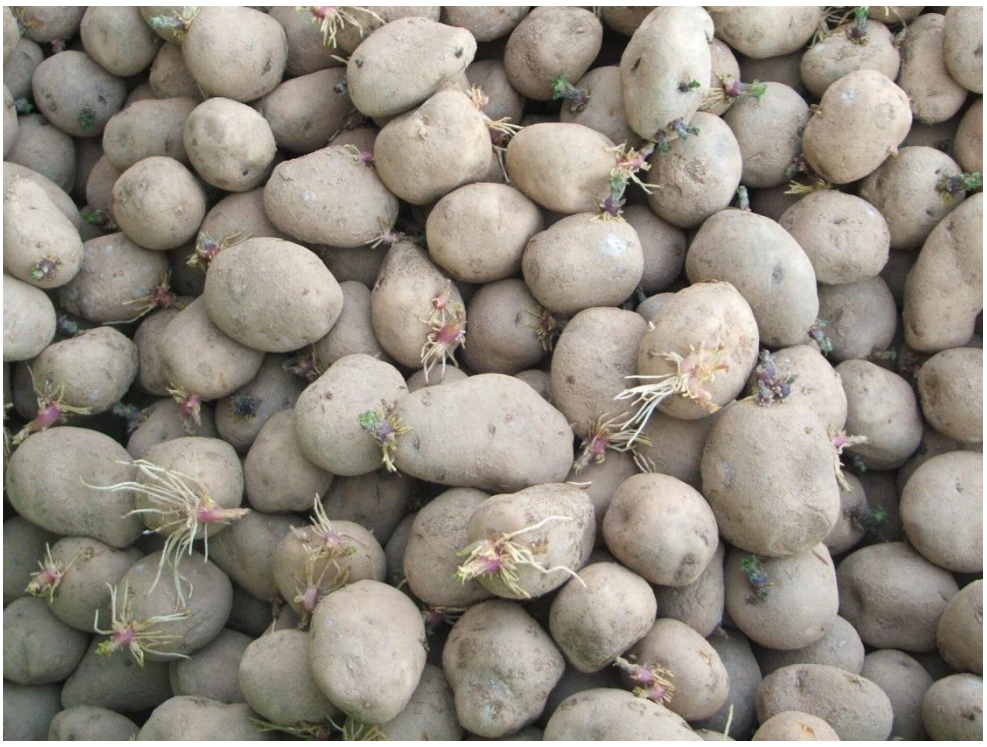


Click on the Met Eireann link to view the maps and for up to date agricultural information.

Soil temperatures are still above normal so when soils dry out and planting gets underway, crops should get off to a good start.

Some seed has been in sprouting trays for a while now so make sure that the sprouts are tough enough to withstand the planting process otherwise you could end up with sprouts breaking off which in turn will lead to uneven emergence and possibly disease infection.

Picture 1; **Weak sprouts will be broken off during planting**



If there is enough time move seed outside to try to harden them up but beware of frosts as these can cause significant damage to the seed. Where the sprouts are too long, you will simply have to break them off and allow the tubers to re-heal before planting.

Fertiliser

As mentioned in the previous newsletter fertiliser costs are going to have to be carefully managed this year as costs have increased dramatically in recent months. The geo-political issues in Ukraine are likely to drive prices even higher and may also further restrict supply as Russia is a significant exporter of fertilisers.

If not already done so, order your fertiliser requirement as soon as possible, we are hearing of delays of supply at the moment so make sure to order in time especially if you are looking for speciality mixes. Sulphate of potash is also reported to be very scarce.

Consult your soil tests before deciding on what is the most appropriate mix to use. Avoid planting into index 1 or 2 soils as research has shown that these types of soils will not achieve the same yields as soils that are in index 3. Also avoid soils that have a very low pH, these types of soils will restrict the availability of the applied fertilisers which may in turn restrict yields. Aim for soil pH of above 6.0 minimum but on the other hand avoid soils with pH over 7.0 as these can also increase the risk of common scab especialy in dry seasons where irrigation is not available. High pH soils also generally have lower availability of soil P and so can reduce tuber numbers.

Table 1; Nutrient requirement for early potatoes (60-90 day crop)

Soil Fertility (P & K Index)	**N kg/ha** (units/ac)	**P kg/ha** (units/ac)	**K kg/ha** (units/ac)
Poor (1)	**155** (124)	**125** (100)	**170** (136)
Deficient (2)	**130** (104)	**115** (92)	**140** (112)
Moderate (3)	**105** (84)	**100** (80)	**110** (88)
High (4)	**80** (64)	**50** (40)*	**80** (64)

**Where soil P test is above 15 mg/l, no P fertiliser is necessary*

Most growers are opting to place fertiliser at planting at this stage, this can typically achieve savings of up to 30% over broadcasting fertiliser. Avoid placing large amounts of muriate of potash into the seed bed as this can occasionally cause scorch, where muriate of potash is being used broadcast approximately

50% onto the ploughing and where possible leave for as long as possible to let the chloride wash out of the soil. If available use sulphate of potash which will have a lower risk of root scorch.

Picture 2; Placing fertiliser can reduce fertiliser costs compared to broadcasting by up to 30%

Wireworm

It has become noticeable in the last few years that the reports of wireworm damage seems to be on the increase. There may be many factors including milder winters, but there is some evidence starting to appear that the abundance of cover crops and grassy stubbles are acting like leys in providing cover for adult beetles to lay eggs which then hatch into the typical larvae who cause the damage. Is is estimated that we now grow approximately 30,0000ha of cover crops between the GLAS scheme and non GLAS farms. So while the previous advice was to be wary of old leys and stubble land would be fine, this may not be necessarily true going forward as more and more tillage farmers are being encouraged to have some type of cover on stubble ground over winter.
As the list of available products to control pest gets smaller every year, growers need to familiarize themselves with the best practice on how to use the different

plant protection products. There are three nematicides now approved in Ireland however Nemathorin is the only option for controlling wireworm as the other nematicides do not claim to control them, they are mainly used to control potato cyst nematode (PCN).

Table 2; Approved nematicides for potatoes 2022

Product name	**Active ingredient**	**Rate per ha**	**Species controlled**
Nemathorin 10G Label	Fosthiazate 10% ww	PCN 30 kg Incorporated	PCN both species & wireworm
		Wireworm 20 kg incorporated	
Velum Prime Label	Fluopyram 400g/l	0.625 L (Spray & Incorporate)	PCN both species
Vydate 10G Label	Oxamyl 100 g/kg	Broadcast - 55 kg	PCN both species
		In furrow - 0.21 kg/ 100m row	

Growers should test land before agreeing to plant potatoes by carrying out test digs. Placing some tubers or carrots in the soil before planting to try to assess the level of wireworms in the soil. While these techniques are not guarenteed to highlight the size of the problem, if you see any evidence of wireworm then it is too risky to plant. Where possible put cereals into the fields for a minimum of two years before any potato crop is planted.

Picture 3; Wireworm seem to be more plentiful in recent years

World Potato Congress

Don't forget that the World Potato Congress takes place in Ireland this year. There will be experts from all over the world in attendance who are here to share their expertise to all attendees. This is a once in a generation opportunity for anyone in the potato industry in Ireland to attend and benefit from the event. The congress runs from May 30th to June 2nd for further details or to register to attend click on the link below.

World Potato Congress 2022

Our mailing address is;

Teagasc,

Oak Park,

Carlow , Co. Carlow

Ireland