Don Somers and his son Conor view a bean/pea crop in Wexford. With a renewed interest in plant-based proteins and sustainable farming, could growing peas come back into favour?

Beans unlock pea potential

The renewed interest in plant-based proteins and sustainable farming is making pea crops in tillage rotations more appealing, despite some of the risks involved

Ciaran Collins
Research Officer,
Teagasc Oak Park

Once a common crop on Irish farms, peas have largely disappeared from tillage rotations due to high risks, especially from pre-harvest lodging. But with a renewed interest in plant-based proteins and sustainable farming, researchers at Teagasc are taking a fresh look at the crop. And the results are encouraging – particularly for those willing to try intercropping.

Factors driving renewed interest in peas

- Demand for home-produced native protein sources for the animal feed sector.
- Rising demand for plant-based proteins for the food sector like pea flour and protein isolate.
- Environmental benefits, including improved soil health, biodiversity, and reduced greenhouse gas emissions.
- Support from the EU Farm to Fork strategy, which prioritises local protein production to reduce reliance on imports.

Our climate is well suited to pea production. Irish yields are amongst the highest in Europe, but despite this, only about 650 hectares of peas are grown here each year. This is a fraction of what could be grown.

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A key advantage of including peas in an Irish arable rotation is their suitability for lighter soils, whereas faba beans can struggle – particularly in dry years. Additionally, peas benefit from a later sowing date in the spring and an earlier harvest than faba beans.

But for Irish farmers in Ireland to embrace peas again, we must address the biggest challenge which is lodging.

The lodging problem

Peas are very prone to lodging, where plants fall over before harvest. This leads to significant yield loss and difficulties with combining.

Teagasc researchers at Oak Park, led by Dr Sheila Alves, have tackled the problem by intercropping peas with faba beans. It is a simple idea where the stronger stems of faba beans support the lodging-prone pea plants. The beans act as a scaffold for the peas.

Starting with plot trials in Teagasc Oak Park and expanding to six commercial farms across Laois, Tipperary, Cork, and Wicklow in 2024 the trials compared sole pea plots with intercropped plots using a 70:30 pea-to-bean ratio (Carrington peas and Louhi beans).

Key outcomes from the 2024 trials

- Reduced lodging: Faba beans help support the pea canopy, resulting in taller, more upright pea plants.
- Extended harvest window: Intercropping delayed maturity slightly, giving farmers more flexibility at harvest without compromising yield.
- Yield stability: Across trials, there was no significant yield loss from intercropping compared to sole pea crops.
- Faba beans with strong stems and early maturity (eg Louhi) are the most effective partners for peas.
- Results to date suggest that intercropping peas with beans does not eliminate the lodging risk and the crop will eventually lodge but it can delay lodging and reduce risk of crop deterioration.

Recommendations for growers based on 2024 experiments

- Sow in April. Plant 80 seeds/m² using a 70:30 pea-to-bean ratio.
- Select early-maturing faba bean with good stem strength to maximise support. Variety Louhi used in 2024.
- Pre emerge herbicide essential, eg Nirvana 4.0L/ha
- Two fungicides three weeks apart from early flowering, similar to faba beans.
- No specialist machinery required, sow and harvest both crops together for ease of management.

Farmer experience

Don Somers farms in an informal partnership with his uncle James Somers in Munroe, Enniscorthy, Co Wexford. They grow winter and spring cereals and break crop, sharing machinery and labour.

"Cullen Mills, based in Ballymurn, Co. Wexford, who are keen to see peas grown locally, asked me to drill a combination crop of peas and beans to try the concept," says Don.

"Our break crop options on some of our very light soils are limited so having seen the Teagasc research results, I decided to give it a go and drilled 17 acres of a combination crop of peas and beans in 2024.

"The idea is that the bean acts as a scaffold for the pea, reducing the level of lodging, which has always been an issue. It did well because, in addition to a reasonable yield and margin, the crop attracts the Protein Aid Payment and a livestock farmer was keen to buy the pea straw. It was by some distance my most profitable crop per acre in 2024.

"Teagasc report a 1.5t/ha increase in wheat yields after break crops compared to continuous tillage, so that is obviously a huge additional benefit." In 2025 the rotation determined that I followed the pea/bean combination with a crop of winter barley for seed which is looking very well. After a good break crop like the peas/beans I am able to drop N applied by about 20 units an acre.

The combination is really the best break crop for some of the very sandy soils we have down here.

Despite the great financial result Don and his Teagasc advisor John Pettit decided to tweak the varieties used in light of the 2024 experience. "Last year we had the Carrington pea variety and a Finnish bean variety called Louhi," says Don.

"This year we are growing Ingrid peas and Vire beans. We believe the beans will be relatively stronger this year; last year the peas were too dominant.

"The crop, like most crops was late last year. We combine in September. We expect to be cutting in the middle of August this year."

Continued on p26

Continued from p25

Herbicide resistance – protect your yields

Testing suspect weeds is the ideal way to help you stay ahead of the issue and protect the effectiveness of programmes into the future

Ciaran Collins
Teagasc Tillage Specialist

Vijaya Bhaskar
Research Officer
Teagasc Oak Park

Do you have weeds in your crop that didn't die after spraying? If you used the correct herbicide and sprayed in good conditions, but the target weeds are still there, it might be worth testing them for herbicide resistance.

With recent sampling highlighting potential resistance issues, testing suspect weeds could help you to stay ahead of the problem and protect the effectiveness of your herbicide programmes into the future.

The EVOLVE project, funded by the Department of Agriculture, Food and the Marine (DAFM), has launched the Weed Watch 2025 campaign and now is an ideal opportunity to get involved by testing suspect weeds on your farm.

Stark findings

Resistance testing carried out on suspect weed samples has uncovered some stark findings:

- Over 60% of blackgrass and more than 80% of Italian ryegrass tested were resistant to ACCase and/or ALS herbicides.
- The first confirmed case of triple-resistant Italian ryegrass (resistant to glyphosate, ACCase, and ALS herbicides) has been reported.
- 34% of wild oats tested showed resistance to ACCase herbicides.
- Some meadow grasses were confirmed resistant to ALS herbicides.
- Resistance to ALS herbicides was also detected in several broad-leaved weeds including poppy, chickweed, common field-speedwell, and corn marigold.

These findings show that resistance is not only spreading but evolving and that it's not limited to grasses alone.

Above: For smaller weed seeds, for example blackgrass, Italian ryegrass, meadow grass, one to two mugs are needed for testing.
Left: For larger weed seeds, such as sterile brome and wild oats, one to two pint glasses of seeds are required for testing.

Herbicide group	Trade names
ALS inhibitors	Pacifica Plus, Broadway Star, Ally Max, Cameo Max
ACCase inhibitors	Axial Pro, Falcon, Stratos Ultra, Centurion Max

> Resistance testing is an essential tool. It helps identify which herbicides will still be effective and supports better long-term management through integrated weed control strategies.

Without proper identification and management, resistant weeds can significantly reduce yields, increase production costs, and limit herbicide options for future seasons. This is especially relevant where blackgrass and Italian ryegrass populations are present, they should be treated as resistance suspects.

What you can do

To stop the spread of resistant weeds, resistance testing is an essential tool. It helps identify which herbicides will still be effective and supports better long-term management through integrated weed control strategies.

As part of the Weed Watch 2025 campaign, Teagasc are offering free resistance testing for both grass and broad-leaved weed samples. All you need to do is to collect and send in samples of weeds that have survived herbicide treatments or appear suspect. You can then use the test results to guide the best herbicide and cultural control options for your specific situation.

For more information or support, visit Weed Watch.