



Lamb liver fluke antibody test results- August 2020

Using abattoir blood samples from slaughtered lambs to detect the timing & spread of fluke infection

Since 2015, from June to December, DAFM has taken lamb blood samples in factories from a proportion of flocks at the time of slaughter. These have been tested for liver fluke antibodies to determine the timing and geographical spread of liver fluke challenge to grazing lambs. This testing did not commence until August in 2020, due to challenges caused by the COVID pandemic in slaughter plants.

The number of flocks selected for sampling from each county is intended to be proportionate to the sheep population of that county over the entire sampling period (August to November 2020). A number of samples are taken from each selected flock, and these are pooled at laboratory level. The presence of liver fluke antibodies reflects the level of challenge the lambs have experienced during the most recent grazing season. The presence of liver fluke antibodies in 2020 born lambs is therefore a sentinel for exposure to liver fluke in the wider sheep population in the region, as by definition these lambs must have been exposed during the 2020 grazing season.

Results up to and including August 2020

Results for the country for August 2020 are as follows:

	Total flocks tested	Positives	% Positive
August 2020	86	4	4.6%

Please see map in Figure 1 below for more detail on the distribution of positive and negative results.



Fluke Exposure August 2020

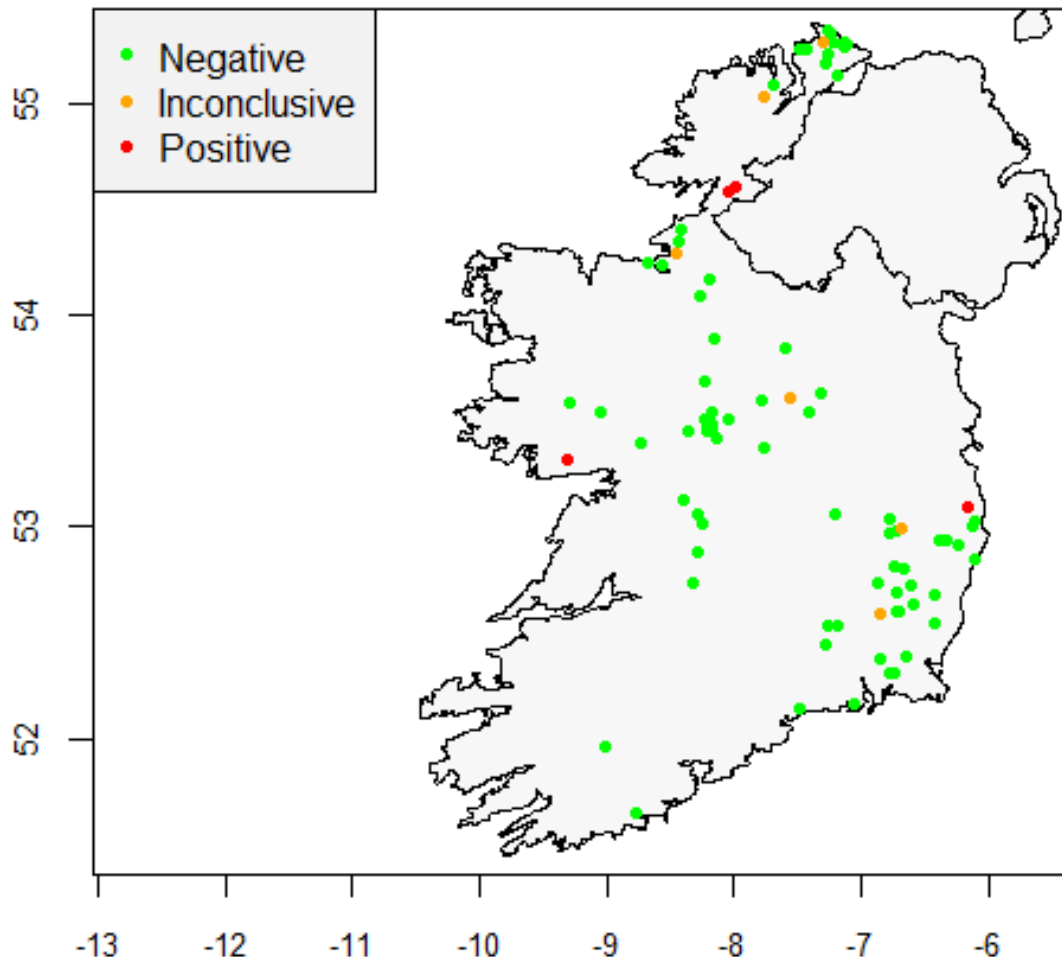


Figure 1: Lamb liver fluke ELISA test results for August 2020. Points have been moved slightly to preserve anonymity of flock owners

In 2019, positive test results from samples taken in August were confined to the north and west. It is apparent from this map that inconclusive and positive results are being found in the south and east at this stage this year. This is not entirely surprising considering the extremely wet summer which Ireland has experienced in 2020, with rainfall above average everywhere- please see the met office website, <https://www.met.ie/climate-statement-for-august-2020>. These results suggest that the risk of liver fluke will be higher in many areas of the country this year, but further test results will need to be considered before any firm conclusion can be drawn in this regard.



As the sample size for some counties is small, farmers in these particular counties need to be cautious when interpreting the results of the survey as they relate to their areas. Additionally the county associated with a batch of lambs is that where the flock of submission is registered. In a minority of cases, where the lambs had been purchased shortly before slaughter, the county associated with a batch will not reflect accurately where the batch of lambs spent its life. Absence of inconclusive or positive test results for a particular county should not be taken as conclusive evidence that liver fluke is absent from that county.

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