REGIONAL VETERINARY LABORATORIES REPORT

August 2026

Regional Veterinary Laboratories (RVLs) carried out necropsy examinations on 433 carcases and 31 foetuses during August 2026. Additionally, 1,277 diagnostic samples were tested to assist private veterinary practitioners (PVPs) with the diagnosis and control of disease in food producing animals. This report describes a selection of cases investigated by the Department of Agriculture, Food and the Marine's (DAFM) veterinary laboratories in August 2026.
The objective of this report is to provide feedback to PVPs on the pattern of disease syndromes at this time of the year by describing common and highlighting unusual cases. Moreover, we aim to assist with future diagnoses, encourage thorough investigations of clinical cases, highlight available laboratory diagnostic tools, and provide a better context for practitioners when interpreting laboratory reports.

Cattle

Pneumonia, enteritis, and ruminal acidosis were the most common diagnoses at necropsy in cattle in the regional veterinary laboratories (RVLs) during August 2026.

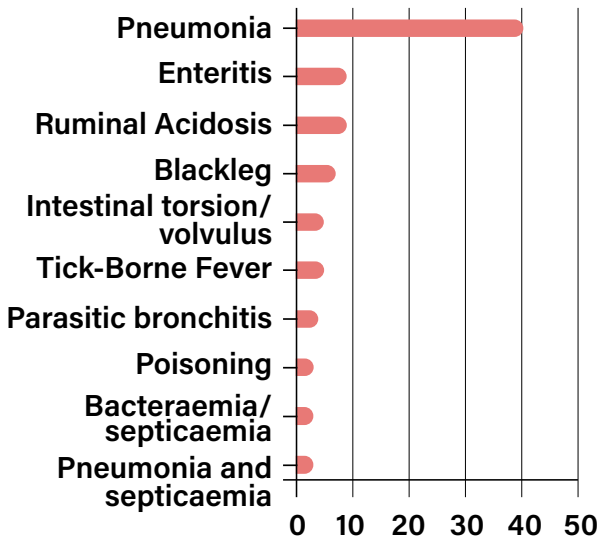


Table 1: **The most common diagnoses in cattle submitted for necropsy in August 2026.**

Gastrointestinal Tract

Clostridial disease

Two three-month old calves were found dead and submitted to Kilkenny RVL. Both had oedematous, inflamed, black sections of the intestine. The reticulum was also affected in one calf. A mild fibrinous pericarditis was noted. Flourescent antibody technique (FAT) tested positive for *Clostridium chauvoei* and *Clostridium septicum* indicating toxaemia. A review of vaccination protocols and the use of a multivalent clostridial vaccine were recommended.



Figure 1: **Marked submucosal haemorrhage in the reticulum of a calf which had positive FAT results due to clostridial toxaemia. Photo: Aideen Kennedy.**

Jejunal haemorrhage

A two-year-old cow was found dead and submitted to Kilkenny RVL. On post-mortem examination, the carcase was markedly pale. Approximately 120cm of the small intestine contained a firm blood clot. Bacterial culture yielded no significant growth and testing for *Clostridium perfringens* toxin was negative. The findings were consistent with jejunal haemorrhage syndrome (JHS).
JHS occurs sporadically in both beef and dairy cows. It is characterised by mechanical obstruction of variable lengths of the jejunum with clotted blood and sloughed intestinal mucosa. The aetiology remains unknown. Reported clinical signs include decreased milk production, anorexia, depression, abdominal discomfort, distension, and melena. Distended intestinal loops may be palpable on rectal examination and sudden death may also occur.



Figure 2: **Blood clots from the jejunum of a cow with jejunal haemorrhage syndrome. Photo: Aideen Kennedy.**

Palm kernel impaction causing intestinal obstruction

Athlone RVL examined a four-year-old dairy cow with a history of severe lethargy, agalactia, and anorexia. Despite veterinary intervention, the animal failed to respond and died within 96 hours of clinical onset. A gross post-mortem examination revealed a severe, intestinal obstruction at the ileocaecal junction. The small intestine was markedly distended with ingesta and a firm obstructing mass was identified immediately proximal to the ileocaecal junction. The mass consisted of a large accumulation of palm kernel grit. The distal intestine, including caecum and colon, were empty.
The findings were consistent with fatal gastrointestinal obstruction caused by impaction of palm kernel grit. This case highlights the potential risk associated with feeding palm kernel in cattle.



Figure 3: **Palm kernel grit causing complete obstruction at the ileocaecal junction. Photo: Seamus Fagan.**

Acute ruminal acidosis and haemorrhagic enteritis

Athlone RVL examined a six-month-old weanling with acute onset colic that had failed to respond to treatment. Severe enophthalmia and marked pallor of the carcase were noted. The rumen contents had a strong acidic odour. The caecum and spiral colon were tympanic. The jejunum contained frank blood and an elongated, organised, intraluminal blood clot measuring approximately 40cm in length. The spleen was enlarged and pulpy.

The rumen pH was 4.8. Histopathology revealed multifocal, acute, suppurative rumenitis and a severe, acute, diffuse, necrotising and haemorrhagic eosinophilic enteritis. Polymerase chain reaction (PCR) testing was positive for *Anaplasma phagocytophilum*, the causative agent of tick-borne fever (TBF). *A. phagocytophilum* replicates in neutrophils and can cause profound immunosuppression which predisposes to secondary infections or an increase of the severity of a coexisting infection.

The low pH and acute rumenitis were consistent with ruminal acidosis. Severe intestinal haemorrhage was attributed to acute mucosal damage. Disseminated intravascular coagulation secondary to septic or acidotic shock was considered a likely mechanism which resulted in the animal's death.



Figure 4: **Intraluminal blood from the jejunum of a weanling with severe haemorrhagic enteritis. Photo: Aoife Coleman.**

Severe enteric coccidiosis

A yearling Friesian bullock with a history of severe, bloody diarrhoea that had failed to respond to treatment was submitted to Limerick RVL for post-mortem examination. Findings included multifocal, pinpoint abomasal ulceration and marked inflammation and mural thickening of the distal small intestine and large intestine.

Parasitological examination detected a strongyle count of 1,300 eggs per gram of faeces, lungworm larvae, and a severe coccidial burden. Histopathological examination of the intestines revealed numerous coccidial organisms at various developmental stages, associated with severe haemorrhagic necrosis of the intestinal mucosa. A large pulmonary thrombus was also identified.

Severe enteric coccidiosis was diagnosed, with concurrent parasitic gastroenteritis and lungworm infection. Extensive intestinal mucosal damage may have permitted bacterial translocation and endotoxin absorption, contributing to systemic shock.

Coccidiosis typically affects younger cattle, but severe damage can also occur in older animals that have concurrent stressors or immunologically naïve animals.

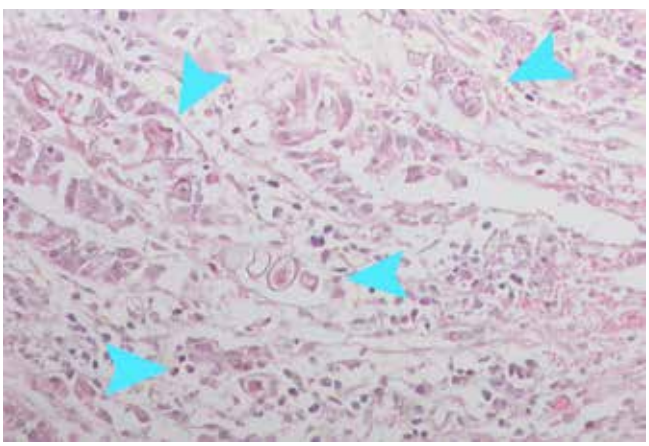


Figure 5: **Histopathological section of intestine showing coccidia in a bullock. Photo: Brian Toland.**

Respiratory Tract

Fibrinosuppurative bronchopneumonia

Athlone RVL examined a five-month-old, bought-in weanling with a history of weight loss despite a good appetite. There was bilateral anteroventral and caudoventral pulmonary consolidation with fibrin on the pleural surfaces and fibrinous adhesions between the lung lobes and the pericardial sac. *Mannheimia haemolytica* was cultured from the lungs. Lung swabs were also PCR positive for *M. haemolytica* and *Mycoplasma bovis*. PCR testing for viral pathogens was negative. Histopathology of the lungs showed a severe, diffuse, fibrinosuppurative bronchopneumonia with streaming 'oat cells' consistent with an *M. haemolytica* infection. Fibrinosuppurative bronchopneumonia was diagnosed.



Figure 6: **Pulmonary consolidation and fibrinous pleuritis in a weanling with bronchopneumonia. Photo: Denise Murphy.**

***Histophilus somni* pneumonia**

A nine-week-old Limousin-cross dairy calf that had failed to respond to treatment for pneumonia was submitted to Limerick RVL. Post-mortem revealed consolidation of approximately 50 per cent of the lungs with a cranioventral distribution. PCR testing of lung tissue was positive for *Histophilus somni*, supporting a diagnosis of bronchopneumonia due to *H. somni.*

H. somni can cause septicaemic infections, with manifestations including pneumonia, polyarthritis, myocarditis, and meningoencephalitis. Disease tends to occur sporadically but can affect several animals in herd.



Figure 7: **Cranioventral pulmonary consolidation in a calf with bronchopneumonia associated with *Histophilus somni*. Photo: Brian Toland.**

Urinary/Reproductive Tract

***Ureaplasma*-associated bovine abortion**

Athlone RVL examined a bovine foetus, which was aborted at seven months' gestation from a cow in her fifth calving season. This was the first abortion reported in the herd. No gross lesions were noted in the carcase. The submitted placenta had thickened intercotyledonary tissue with multifocal areas of haemorrhage and a leathery appearance. Aspergillus spp. was isolated from the placenta. Histopathological examination showed a lymphohistiocytic, interstitial pneumonia and placentitis characterised by moderate necrosis, mineralisation, fibrin deposition, thrombosis, vasculitis, and bacterial colonies. No fungal hyphae were identified.

The histopathology lesions were suggestive of *Ureaplasma*-associated abortion. Subsequent testing of foetal membranes and abomasal contents was PCR positive for *Ureaplasma* spp. The isolation of *Aspergillus* spp from the placenta alone, and in the absence of fungal hypae on histopathology, was considered most likely to reflect environmental contamination of the placenta following the abortion. A conclusion of abortion caused by *Ureaplasma* spp. was made.

Ureaplasma diversum is a common inhabitant of the vagina and prepuce of cattle that also may be associated with placentitis and subsequent abortions. Abortions are usually sporadic, although severe outbreaks occasionally occur. Infection may also result in stillbirths and births of weak calves. Most foetuses are aborted in the third trimester and are well-preserved. Dams generally show no systemic signs of illness, although retained foetal membranes are common.

Cardiovascular System

Vegetative endocarditis

A six-year-old cow was submitted to Kilkenny RVL with a history of reduced milk production and weight loss. On post-mortem examination, vegetative endocarditis was evident. *Trueperella pyogenes* was cultured from multiple organs indicating a bacteraemia. *T. pyogene*s is a frequent secondary invader and may not cause the initial infection but tends to proliferate in inflamed tissues. During bacteraemia, circulating bacteria can adhere to the heart valves where proliferation and accumulation of fibrin and platelets lead to the formation of proliferative granulation tissue mixed with inflammatory cells and debris giving the lesion a vegetative appearance.



Figure 8: **Vegetative endocarditis in a cow. Large, friable yellow white proliferative and necrotic tissue was present on the atrioventricular valves. Photo: Aideen Kennedy.**

Nervous System

Thrombotic meningoencephalitis

Athlone RVL examined a five-month-old weanling that had been found recumbent in a paddock, with mild abdominal distension and respiratory distress. The animal died despite treatment. On post-mortem examination, there was right anteroventral pulmonary consolidation and a necrotic haemorrhagic lesion in the left ventricular wall. Multifocal haemorrhages and rarefaction were present bilaterally in the basal ganglia in the cerebrum, with more severe involvement on the right side. *H. somni* was detected by PCR from the pulmonary and cardiac lesions. Histopathological examination of the heart showed an acute, necrosuppurative myocarditis with thrombosis and haemorrhage. Cerebral sections showed multifocal haemorrhage, necrosis, and neutrophilic meninigitis, accompanied by thrombosis and marked fibrinoid and necrotising vasculitis. Diffuse fibrinosuppurative bronchopneumonia was identified in the lungs. A diagnosis of thromboembolic meningoencephalitis (TEME), myocarditis, and bronchopneumonia due to *H. somni* infection was made.

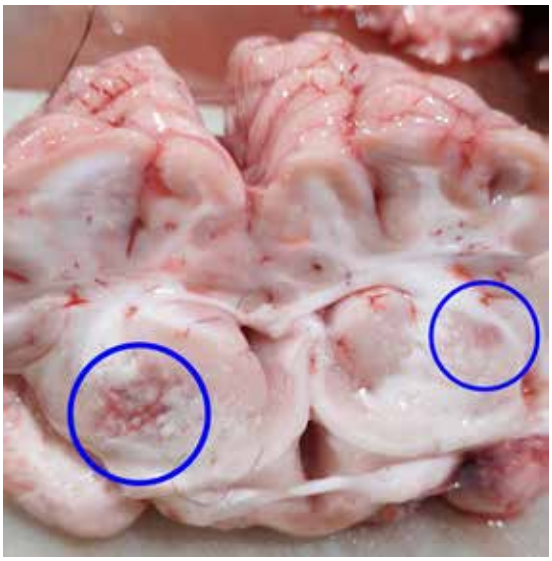


Figure 9: **Bilateral haemorrhages, necrosis, and rarefaction associated with blood vessels in the cerebrum of a weanling with thromboembolic meningoencephalitis. Photo: Denise Murphy.**

Caudal vena cava thrombosis

An 18-month-old heifer was found dead and submitted to Kilkenny RVL for post-mortem examination. A hepatic abscess was identified adjacent to the caudal vena cava. There was multifocal abscessation of the lungs; some of the pulmonary abscesses were associated with blood vessels. There was pulmonary haemorrhage. The rumen contained a large blood clot indicating that blood had been swallowed. Caudal vena cava thrombosis and embolic pneumonia were diagnosed. Caudal vena cava thrombosis (CVCT) commonly develops following ruminal acidosis, rumenitis, and subsequent hepatic abscessation. The hepatic abscess may extend into the caudal vena cava resulting in septic thrombus formation. Fragments of the thrombus can embolise to the lungs causing pulmonary abscessation and embolic pneumonia. Involvement of adjacent pulmonary blood vessels may lead to haemorrhage into the airways resulting in haemoptysis or epistaxis. The blood can subsequently be swallowed, which is the likely explanation for the blood clot found in the rumen in this case.



Figure 10: **Hepatic abscessation containing purulent material in a heifer. Photo: Aideen Kennedy.**



Figure 11: **Multifocal pulmonary abscessation consistent with embolic pneumonia. Photo: Aideen Kennedy.**



Figure 12: **Blood clot in the rumen, representing swallowed blood following pulmonary haemorrhage in a case of CVCT. Photo: Aideen Kennedy.**

Musculoskeletal

Arthritis and tenosynovitis

Athlone RVL examined a bull that had been euthanised following lameness which was non-responsive to treatment. Necropsy disclosed fibrinosuppurative arthritis of the left stifle joint, with synovial membrane proliferation, adhesions, and intra-articular synovial effusion. Distally, the tendon sheaths on the plantar aspect of both hindlimbs contained flocculant, purulent fluid consistent with tenosynovitis. Multifocal vegetative masses were identified on the left atrioventricular valve. *T. pyogenes* was isolated from the left stifle joint. The liver was diffusely firm, with prominent bile ducts; liver fluke were present within the hepatic biliary system and gallbladder.

Fibrinosuppurative arthritis, tenosynovitis, arising from embolic spread due to a vegetative endocarditis, and concurrent fasciolosis were diagnosed.



Figure 13: **Fibrinosuppurative arthritis of the stifle joint of a bull. Photo: Aoife Coleman.**



Figure 14: **Multifocal vegetative masses affecting the left atrioventricular valves in a bull. Photo: Aoife Coleman.**

Blackleg

Blackleg was diagnosed in two five-month-old cattle submitted to Kilkenny and Limerick RVLs.

A weanling submitted to Kilkenny RVL after being found dead, was the fourth death in the group within 24 hours. On post-mortem examination, there were multifocal areas of dry, black, emphysematous muscle. The affected muscle tested FAT positive for *C. chauvoei.*

Limerick RVL examined a five-month-old Aberdeen Angus cross heifer that died suddenly at grass. Its vaccination status was unknown. Post-mortem examination revealed dark red-to-black emphysematous muscle lesions involving the right masseter muscle and severe acute fibrinous pericarditis. *C. chauvoe*i was detected by FAT on impression smears from both lesions.

In both cases, a review of the herd's vaccination protocols was advised, and the use of a multivalent clostridial vaccine recommended.



Figure 15: **Severe acute fibrinous pericarditis from a heifer with clostridial myositis. Photo: Brian Toland.**

Sheep

Parasitic gastroenteritis, bacteraemia, and ruminal acidosis were the most common diagnoses at necropsy in cattle in the regional veterinary laboratories during August 2026.

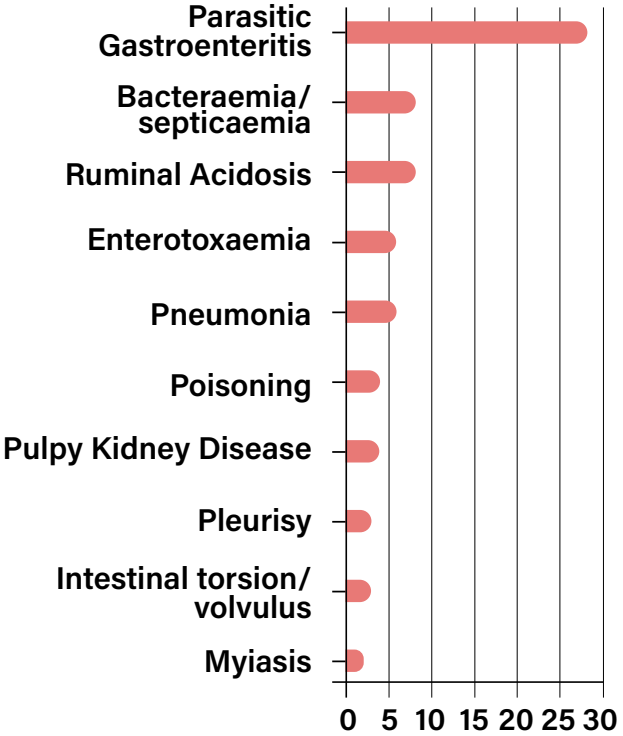


Table 2: **The most common diagnoses in sheep submitted for necropsy in August 2026.**

Gastrointestinal Tract

Strangulated inguinal hernia

Athlone RVL examined a five-month-old ram lamb that had been found dead at pasture. On necropsy, there was herniation of the large intestine and associated mesentery through the right inguinal ring into the scrotum, with strangulation of the herniated tissues. Peritoneal effusion and fibrin tags were present near the inguinal ring and within the pelvic region. Inguinal herniation with subsequent strangulation was diagnosed. Inguinal herniation into the scrotum is uncommon in rams; a hereditary predisposition has been suggested, although the mode of inheritance remains uncertain.



Figure 16: **Strangulated, congested intestine in a lamb with an inguinal hernia: Photo: Aoife Coleman.**

Intestinal torsion

Limerick RVL examined a four-month-old lamb that died suddenly following a recent move to new pasture. Post-mortem examination revealed a 360° torsion of the intestine at the ileocaecal junction, with ischaemia of the affected bowel and haemorrhagic liquid contents. Rumen pH was 5.4, which was below the reference range, indicating rumen acidosis. Tests for enteric pathogens that could affect gastrointestinal motility were negative.

Intestinal torsions in lambs may be associated with recent dietary changes, particularly a move to highly digestible pasture, where increased hindgut fermentation, gas production, and distension, together with altered intestinal motility, may predispose to intestinal displacement and torsion.



Figure 17: **Intestinal torsion at the ileocaecal junction in a lamb. Photo: Brian Toland.**



Figure 18: **Severely congested and haemorrhagic caecum secondary to intestinal torsion. Photo: Brian Toland.**

Gall bladder torsion with intestinal entrapment

Sligo RVL examined a six-month-old ram lamb which had been found dead at pasture. Necropsy disclosed torsion of the gall bladder around its longitudinal axis. The gallbladder was markedly distended, with a thickened, necrotic wall likely due to circulatory compromise. The gall bladder content was a mixture of congealed bile and clotted blood. The enlarged gall bladder formed a heavy, pedunculated mass that had entrapped a loop of intestine, resulting in intestinal obstruction. The intestine proximal to the entrapment was distended with content, while the distal intestine was largely empty.



Figure 19: **Necrotic gallbladder containing congealed bile and clotted blood. Photo: Mícheál Casey.**

Respiratory Tract

Systemic pasteurellosis

Athlone RVL examined a five-month-old lamb with a history of sudden-onset depression, fever, bilateral nasal discharge, and harsh lung sounds. The lamb died despite treatment and was the second similar loss in two days.

Post-mortem examination revealed bilateral ulceration of the caudal tongue, diffuse petechial to ecchymotic haemorrhages over the pleural surfaces of all lung lobes, multifocal hepatic necrosis, and marked splenomegaly. *Bibersteinia trehalosi* was cultured from the lung and liver. PCR testing for tick-borne fever was negative. A diagnosis of systemic pasteurellosis was made.



Figure 20: **Diffuse petechial to ecchymotic haemorrhages over the pleural surfaces of the lungs. Photo: Denise Murphy.**



Figure 21: **Fibrinous linear ulceration of the caudal tongue on a lamb with pasteurellosis. Photo: Denise Murphy.**

Pneumonic pasteurellosis

Limerick RVL examined a seven-month-old Suffolk ewe lamb that had died suddenly at pasture. The lamb had recently received an anthelmintic treatment. Post-mortem examination revealed firm, rubbery lungs with multifocal-to-coalescing, dark red-to-purple areas with fibrin on the pleural surface of the right caudal lobe. Bacterial culture yielded a mixed growth, while PCR testing was positive for *M. haemolytica, B. trehalosi,* and *Pasteurella multocida*. A diagnosis of acute fibrinous pneumonia (pneumonic pasteurellosis) was made with *M. haemolytica* considered the primary agent for post-mortem findings.



Figure 22: **Severely congested and oedematous lungs with fibrinous pleuritis with pasteurellosis in a lamb. Photo: Brian Toland.**

Pasteurellosis in sheep: prevention is key

Pasteurellosis in sheep occurs in two main forms: systemic disease and pneumonia. Systemic pasteurellosis is principally caused by *Bibersteinia trehalosi* and typically affects weaned lambs during autumn. Pneumonic pasteurellosis is most commonly caused by *Mannheimia haemolytica*, with *B. trehalosi* and *Pasteurella multocida* frequently involved.

These bacteria can be carried by healthy sheep, with stressors such as weaning, transport, mixing, dietary changes, and adverse weather predisposing to disease. Concurrent parasitism or nutritional deficiencies may increase susceptibility.

Prevention relies on completing an appropriate pasteurellosis vaccination programme before the risk period, minimising management stressors, and effective parasite control. Vaccination may not provide full protection when sheep are under significant stress. Sudden death may occur, particularly with systemic disease, leaving little opportunity for treatment. Prompt veterinary assessment is advised. Post-mortem examination can aid in diagnosis and helping to identify underlying conditions, such as parasitism or mineral deficiencies.

Nervous System

An 18-month-old, bought-in hogget that had been hill grazing was submitted to Sligo RVL after being found dead. Shivering and staggering had been observed the previous day. Post-mortem examination revealed anaemia, dehydration, a haemorrhaging duodenal ulcer, and pneumonia.

Concurrent parasitic gastroenteritis associated with strongyle infection was identified, and numerous ticks were present on the fleece. Louping ill virus was detected by PCR in central nervous system tissue.

Louping ill is caused by a tick-transmitted flavivirus and occurs predominantly on upland and hill grazing pastures where the sheep tick, *Ixodes ricinus*, is present. Concurrent tick-borne fever, caused by *A. phagocytophilum*, can cause marked immunosuppression and exacerbate the severity of infection.

Clinical signs include fever, muscular tremors, staggering, incoordination, and paralysis; affected sheep may die rapidly. Lambs without protective maternal antibodies and previously unexposed sheep introduced to infected grazing are particularly susceptible.

Prevention centres on awareness of disease risk in certain areas, appropriate sourcing of replacement sheep, and ensuring lambs on affected farms are exposed to infected grazing while still protected by maternal antibodies, allowing them to build up active immunity.

Prompt veterinary investigation is advised when neurological signs or unexplained deaths occur on tick-infested pasture.

Poisonings

Suspected Japanese spindle poisoning

Two Suffolk ewes were submitted to Sligo RVL after being found recumbent and semi-conscious, and were subsequently euthanised. Another sheep had died the previous day. Garden clippings had reportedly been deposited in the field several days earlier.

On necropsy, there were no significant gross findings. However, a number of atypical small leaves with a distinctive scalloped margin were found in the ruminal content of both ewes.

The National Botanic Gardens' Plant Identification Service identified these as Japanese spindle, (*Euonymus japonicus*), an ornamental shrub. Ingestion of this potentially toxic plant was considered the likely cause of illness.

This case highlights the risk of disposing of garden clippings in fields accessible to livestock. Even where garden waste does not contain poisonous plants, it can cause other problems including ruminal acidosis. Lawn clippings may also be contaminated with dog or cat faeces containing *Neospora caninum* or *Toxoplasma gondii* oocysts, respectively, posing an additional infection risk to grazing livestock.



Figure 23: **Japanese spindle leaves recovered from the ruminal contents of affected sheep. Photo: Mícheál Casey.**

Flystrike with systemic bacterial infection

Post-mortem examination of a hogget in Sligo RVL revealed extensive blowfly myiasis (flystrike) and severe dehydration. The bacterium *Ignatzschineria* larvae was isolated from multiple tissues, supporting systemic bacterial infection associated with flystrike.

Flystrike causes tissue damage as blowfly larvae feed on the skin and underlying tissue. Severe infestations can be complicated by secondary bacterial infection and toxaemia, leading to rapid deterioration and death. Early detection and prompt treatment are essential.

Pigs

Oedema disease

Seven weaned pigs, approximately 35–50 days old, were submitted to Dublin RVL for post-mortem examination following neurological signs, including paddling, and death. Post-mortem examination revealed mild meningeal vascular congestion and moderate pulmonary congestion in all pigs. Mild unilateral facial oedema was observed in one pig and moderate gelatinous oedema of the mesentery of the spiral colon was also observed in another pig.

Histopathology revealed cerebral microangiopathy with perivascular oedema and associated brain tissue damage, together with mesenteric oedema and mild vasculitis. *Escherichia coli* was cultured from the small intestine of all pigs and PCR testing of intestinal contents detected Shiga toxin in the majority of piglets tested. These findings supported a diagnosis of oedema disease.

Oedema disease principally affects recently weaned pigs. It is caused by certain strains of *E. coli* that colonise the small intestine and produce Shiga toxin, which damages small blood vessels, causing oedema and neurological signs. Changes in diet and the stresses associated with weaning, mixing, and movement may favour disease development. Prevention centres on appropriate vaccination, careful management of the dietary transition, good hygiene, and minimising weaning stress.