A survey of 453 sheep and/or cattle farmers in the UK shows confusion over the diagnosis and control of rumen fluke (Calicophoron daubneyi)

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Background
Liver fluke (Fasciola hepatica) infection causes significant mortality and morbidity in sheep and cattle. Rumen fluke (Calicophoron daubneyi) is considered to be an emerging parasite across Europe, with increasing prevalence in the UK. Ongoing debates about its clinical importance in sheep and cattle in the UK. Little is known about awareness of rumen fluke and if farmers are actively treating sheep and cattle in the UK.

Lifecycle
Liver and rumen fluke have similar lifecycles. Main difference being adult parasites locality.

In the UK both parasites have been shown to utilise the same intermediate host snail, Galba truncatula ³,⁴.

Aim
Capture awareness of liver fluke and rumen fluke infection and evaluate current practise in the control of these parasites in cattle and sheep in the UK.

Methods
Online survey designed in English and Welsh:
- **Section 1:** Liver and rumen fluke awareness and concern.
- **Section 2:** Liver and rumen fluke on your farm.
- **Section 3:** Liver and rumen fluke treatments.
- **Section 4:** Farm characteristics.

Distributed by a variety of outlets December 2019 - March 2020.

Results

**Parasite concern**

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Are you concerned about rumen fluke?</th>
<th>Are you concerned about liver fluke?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>Not at all</td>
<td>Not at all</td>
</tr>
<tr>
<td>20%</td>
<td>Not sure</td>
<td>Slightly</td>
</tr>
<tr>
<td>40%</td>
<td>Somewhat</td>
<td>Moderately</td>
</tr>
<tr>
<td>60%</td>
<td>Extremely</td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td></td>
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<tr>
<td>100%</td>
<td></td>
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</tr>
</tbody>
</table>

67.69% reported liver fluke on their farm
42.85% (n=27) reported methods of detection not applicable to rumen fluke
19.87% reported rumen fluke on their farm

**Respondents (n=453)**

**Previously treated for liver fluke 89.23% (n=398)**
- Treat every year 83.17% (n=178/214)
- Treat every year 78.36% (n=268/342)
- In 2019 triclabendazole was most frequently used drug

**Previously treated for rumen fluke 26.19% (n=83)**
- Treat every year 59.09% (n=26/44)
- Treat every year 53.44% (n=31/58)
- In 2019, >60 % treating with unsuitable products

**Confusion between rumen and liver fluke**

**Lower awareness of rumen fluke**

**Farmers showed concern about rumen fluke**

**Farmers are treating rumen fluke with unsuitable products**

**Liver fluke treated more routinely**

Conclusions

**Sources:**