

## J K Senior & Sons 2019 Summary of this Years Spray Costs

These are independent spray costs covering 30000 acres in East Yorkshire and surrounding areas. This format monitors your spray inputs to show how you have performed through the years, you can see the high disease years, 2012, 2014, 2016, 2017 and 2019 in the wheat. Also a slight drop in the herbicide costs due to the introduction of new chemistry and the ability to get autumn sprays on which reduced the need for post emergence blackgrass sprays.

Fungicides are higher due to the season.

Growth regulators were higher due to new varieties having weaker straw.

Trace elements, mainly manganese, did start to show very early on in the season.

<u>Winter Wheat</u>	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	44.66	54.29	64.92	60.69	86.10	84.55	97.79	95.77	97.24	94.30
Fungicides	54.13	54.19	89.25	61.02	106.19	77.29	83.86	89.29	78.89	84.78
Insecticides	3.28	5.01	3.36	1.36	2.95	1.52	2.32	3.60	1.19	2.59
Growth Regulators	5.10	3.56	9.14	4.43	8.66	8.47	7.23	8.22	6.74	8.11
Trace Elements	2.44	2.89	2.07	1.69	2.63	2.73	2.33	2.22	2.41	3.93
Molluscicides	0.16	0.29	0.10	0.58	0.10	0.55	0.32	0.27	0.98	0.21
Adjuvants	2.46	2.08	1.99	2.10	1.62	1.12	1.05	0.97	1.05	0.86
	<b>112.23</b>	<b>122.31</b>	<b>170.83</b>	<b>131.86</b>	<b>208.25</b>	<b>176.23</b>	<b>195.00</b>	<b>200.34</b>	<b>188.50</b>	<b>194.78</b>

Spray inputs to winter barley are similar to wheat, over all figures are down 3%.

<u>Winter Barley</u>	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	43.52	50.27	59.51	62.74	80.60	87.59	98.68	99.32	95.56	86.55
Fungicides	44.58	42.29	56.66	35.82	62.35	49.03	46.35	54.68	68.73	72.87
Insecticides	1.48	0.96	1.00	1.06	0.96	0.93	1.09	1.70	1.40	2.66
Growth Regulators	6.79	4.08	7.01	6.15	8.04	5.68	6.06	6.10	5.93	6.47
Trace Elements	2.49	2.84	3.11	2.92	3.05	3.40	2.72	3.24	3.32	2.40
Molluscicides	0.00	0.00	0.00	0.06	0.00	0.34	0.04	0.10	0.04	0.00
Adjuvants	1.53	1.75	1.98	2.89	1.42	1.32	1.36	1.37	1.33	0.16
	<b>100.39</b>	<b>102.19</b>	<b>129.27</b>	<b>111.65</b>	<b>156.42</b>	<b>148.29</b>	<b>156.30</b>	<b>166.51</b>	<b>176.31</b>	<b>171.11</b>

Spray inputs to oilseed rape are down 3% mainly as less fungicide was required.

<u>Oilseed Rape</u>	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	79.52	73.69	71.86	75.72	93.63	89.09	89.57	93.75	91.37	92.45
Fungicides	23.68	23.58	29.55	13.42	36.88	21.35	32.05	33.37	28.92	19.86
Insecticides	1.65	3.98	1.53	1.37	1.20	3.29	3.34	14.15	14.14	19.66
Growth Regulators	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.05	0.00	0.00
Trace Elements	0.15	1.95	1.00	0.09	1.81	0.41	0.41	0.34	0.14	0.45
Molluscicides	0.37	1.67	0.61	1.43	0.55	2.77	2.53	2.02	4.28	3.19
Adjuvants	0.27	0.55	0.91	1.00	0.78	0.88	1.02	0.67	1.45	0.94
	<b>105.64</b>	<b>105.42</b>	<b>105.46</b>	<b>93.03</b>	<b>134.85</b>	<b>117.86</b>	<b>129.02</b>	<b>144.35</b>	<b>140.30</b>	<b>136.55</b>

<u>Vining Peas</u>	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	63.65	52.03	53.18	59.98	78.41	75.02	72.35	57.38	53.19	49.33
Fungicides	5.10	5.13	10.37	2.38	7.93	14.54	14.44	13.66	1.47	9.15
Insecticides	13.62	9.22	5.09	7.99	7.69	11.79	9.20	13.11	13.72	13.25
Growth Regulators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trace Elements	0.00	0.00	0.74	0.00	0.16	0.00	0.00	0.00	0.52	0.07
Molluscicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adjuvants	0.26	0.31	0.21	0.29	0.17	0.08	0.65	0.19	0.00	0.07
	<b>82.63</b>	<b>66.69</b>	<b>69.59</b>	<b>70.63</b>	<b>94.36</b>	<b>101.43</b>	<b>96.64</b>	<b>84.34</b>	<b>68.90</b>	<b>71.87</b>

Bruchid Beetle control was the main cause of the insecticide price increase in the spring beans.

<u>Spring Beans</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	87.63	79.53	57.69	77.78	51.19	63.59
Fungicides	61.48	25.72	27.76	26.58	24.75	22.18
Insecticides	17.81	11.49	12.52	13.43	13.09	25.77
Growth Regulators	0.00	0.00	0.00	0.00	0.00	0.00
Trace Elements	0.20	0.00	0.00	0.00	0.00	0.00
Molluscicides	0.00	0.64	0.35	0.00	0.00	0.43
Adjuvants	0.32	0.24	1.17	0.81	0.35	0.34
	<b>167.44</b>	<b>117.62</b>	<b>99.49</b>	<b>118.60</b>	<b>89.38</b>	<b>112.31</b>

<u>Spring Barley</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
Herbicides	47.29	42.97	43.82
Fungicides	31.93	33.44	32.26
Insecticides	2.50	2.32	1.95
Growth Regulators	1.75	2.31	1.55
Trace Elements	1.90	2.48	1.78
Molluscicides	0.05	0.00	0.01
Adjuvants	0.60	0.25	0.00
	<b>86.02</b>	<b>83.77</b>	<b>81.39</b>