

**Table 4.** Comparative production costs of different silage crops. Costs are taken mainly from Nix (2007) and Beaton *et al.* (2007). Yield estimates are from Nix (2007) and this study.

Silage Crop	Grass	Maize	Winter Wheat	Winter Wheat	Spring Barley	Spring Barley
Management/treatment	Two cuts *		Fermented	Urea	BS	MIN
Variable costs (£/ha)						
Seed	12	121	47	47	52	52
Fertilizer	208	60	130	130	69	69
Sprays	11	37	126	126	72	35
Lime	15	15	15	15	15	15
Additives	60	50	33	92	33	33
Contractor costs						
Establishment	46	83	85	85	85	85
Harvesting	300	139	150	165	150	150
Effluent absorbent ***	76	0	0	0	0	0
Rent	123	123	123	123	123	123
<b>Total costs (£/ha)</b>	<b>851</b>	<b>628</b>	<b>709</b>	<b>783</b>	<b>599</b>	<b>562</b>
<b>Yield (t DM/ha) **</b>	11.1	12.0	14.1	18.3 <sup>†</sup>	10.4	9.2
<b>Costs (£/t DM)</b>	<b>76.7</b>	<b>52.3</b>	<b>50.3</b>	<b>42.8</b>	<b>57.6</b>	<b>61.1</b>
<b>Costs incl. ELS (£/tDM)</b>						<b>36.1</b>

\* Assuming two successive cuts, and five year leys.

\*\* Yield of wholecrop silage is based on the values obtained in this study. Values for grass and maize taken from Nix (2007).

\*\*\* £2/t @ 38t silage/ha (Beaton *et al.* 2007)

† The urea-based wheat yield estimate is based on only four crops grown as part of this study.

## Changes

Cant call current table "Total costs" as many costs, notably fixed costs not accounted for. Better to just look at the costs that vary between the different forages.

## Deleted

Establishment costs –Apart from seed, fert, sprays (which are in variable costs), rest would come under fixed costs.

Lime is same for each crop

Rent will be same for each, with value depending on location. Also its a fixed

Effluent absorber – not typically used

**Table 4.** Comparative production costs of different silage crops. Costs are taken mainly from Nix (2009).

**Xx** – figures changed from original used by Will – used Nix 09

**XX** - figures taken from actual trial

Silage Crop	Grass	Maize	Winter Wheat	Winter Wheat	Spring Barley	Spring Barley
Management/treatment	Two cuts		Fermented	Urea	BS	MIN
Variable costs (£/ha)						
Seed	20	148	49	49	59	59
Fertilizer	400	260	323	323	176	176
Sprays	10	37	139	139	79	35
Additives	60	50	33	200	33	33
Contractor costs						
Harvesting	300	153	180	180	180	180
<b>Total costs (£/ha)</b>	<b>790</b>	<b>648</b>	<b>724</b>	<b>891</b>	<b>527</b>	<b>483</b>
<b>Yield (t/ha)</b>	<b>50</b>	<b>40</b>				
<b>Yield (t DM/ha) **</b>	<b>12.5</b>	<b>12.0</b>	14.1	18.3 <sup>†</sup>	10.4	9.2
<b>Costs (£/t DM)</b>	<b>63.4</b>	<b>54</b>	<b>51.4</b>	<b>48.9</b>	<b>50.67</b>	<b>52.5</b>
<b>Costs incl. ELS (£/tDM)</b>			<b>38.93</b>			<b>27.5</b>

\* assumed reduction in wheat yield of 5% through reduced herbicide regime i.e.12.69t/ha

\*\* Yield of wholecrop silage is based on the values obtained in this study. Values for grass and maize taken from Nix (2009).

† The urea-based wheat yield estimate is based on only four crops grown as part of this study.

Assumptions on DM % - Maize @30%, Grass@25%

### Key results

The costs of growing CBWCS (either from winter wheat or spring barley) are comparable to Maize silage, and around £10-15/tDM less than grass silage.

ELS payments reduce the costs of growing wholecrop cereal by £25/tDM for spring barley and by around £15/tDM for winter wheat (depending on yield loss from reduced herbicide regime).

