

# EU Feed Protein Balance Sheet

2019/20 Protein source	Million tonnes						Protein content (feed use) (G)	Million tonnes (crude protein)		% feed use of EU origin (I) / (H)	% of total feed use
	Total EU production (A)	EU imports (B)	EU exports (C)	Total EU domestic use (D)	EU total feed use (E)	Feed use EU origin (F)		EU total feed use (H) = (E) * (G)	Feed use EU origin (I) = (F) * (G)		
<b>CROPS</b>					<b>181.7</b>	<b>161.0</b>		<b>18.36</b>	<b>16.55</b>	<b>90%</b>	<b>22%</b>
<b>CEREALS (of which)</b>	<b>319.6</b>	<b>24.9</b>	<b>49.9</b>	<b>294.6</b>	<b>176.6</b>	<b>156.3</b>		<b>17.00</b>	<b>15.30</b>	<b>90%</b>	<b>20%</b>
Common wheat	147.0	2.1	33.0	116.1	49.8	47.7	11.0%	5.48	5.25		
Barley	63.1	0.6	10.5	53.2	37.2	37.2	10.0%	3.72	3.72		
Durum	7.5	2.0	1.2	8.3	0.4	0.4	12.0%	0.05	0.04		
Maize	70.1	20.0	4.7	85.4	68.5	50.5	8.0%	5.48	4.04		
Rye	8.3	0.0	0.3	8.1	2.5	2.5	11.0%	0.28	0.28		
Sorghum	1.0	0.1	0.0	1.0	0.5	0.4	11.0%	0.05	0.05		
Oats	7.8	0.0	0.2	7.7	5.7	5.7	11.0%	0.63	0.63		
Triticale	11.0	0.0	0.0	11.0	8.7	8.7	11.0%	0.96	0.96		
Others	3.8	0.2	0.0	3.9	3.3	3.2	11.0%	0.36	0.35		
<b>OILSEEDS (feed use without crushing) (columns (E) and (F))</b>	<b>29.9</b>	<b>22.2</b>	<b>0.7</b>	<b>51.4</b>	<b>1.6</b>	<b>1.6</b>		<b>0.46</b>	<b>0.46</b>	<b>100%</b>	<b>1%</b>
Soya beans	2.7	15.3	0.2	17.8	1.2	1.2	33.0%	0.40	0.40		
Rapeseed	17.1	5.8	0.1	22.9	0.2	0.2	18.8%	0.03	0.03		
Sunflowerseed	10.1	1.1	0.5	10.7	0.2	0.2	14.8%	0.03	0.03		
<b>PULSES (of which)</b>	<b>4.2</b>	<b>0.6</b>	<b>0.4</b>	<b>4.4</b>	<b>3.6</b>	<b>3.1</b>		<b>0.90</b>	<b>0.78</b>	<b>87%</b>	<b>1%</b>
Field peas	2.2	0.4	0.1	2.5	1.9	1.7	22.5%	0.43	0.38		
Broad beans	1.7	0.0	0.3	1.5	1.2	1.2	26.0%	0.32	0.32		
Lupins	0.3	0.2	0.0	0.5	0.4	0.3	35.0%	0.16	0.09		
<b>CO-PRODUCTS</b>					<b>85.9</b>	<b>45.3</b>		<b>25.88</b>	<b>9.48</b>	<b>37%</b>	<b>31%</b>
<b>OILSEED MEALS</b>	<b>30.1</b>	<b>24.2</b>	<b>1.3</b>	<b>53.0</b>	<b>52.8</b>	<b>14.3</b>		<b>21.07</b>	<b>4.96</b>	<b>24%</b>	<b>25%</b>
<b>SOYA BEAN MEALS (of which)</b>	<b>11.6</b>	<b>18.5</b>	<b>0.3</b>	<b>29.8</b>	<b>29.6</b>	<b>1.0</b>		<b>13.51</b>	<b>0.43</b>	<b>3%</b>	<b>16%</b>
Soya bean meal (from EU soya bean production)	1.0			1.0	1.0	1.0	43.0%	0.43	0.43		
Soya bean meal (imported soya bean crushing)	10.3		0.3	10.0	9.8	0.0	45.5%	4.47	0.00		
Soya bean meal (traded as such)		18.5		18.5	18.5	0.0	45.5%	8.42	0.00		
Soya bean protein concentrate	0.3			0.3	0.3	0.0	62.5%	0.19	0.00		
<b>RAPESEED MEALS (of which)</b>	<b>12.6</b>	<b>0.3</b>	<b>0.4</b>	<b>12.5</b>	<b>12.5</b>	<b>9.0</b>		<b>4.11</b>	<b>2.96</b>	<b>72%</b>	<b>5%</b>
Rapeseed meal (from EU rapeseed production)	9.4		0.4	9.0	9.0	9.0	33.0%	2.96	2.96		
Rapeseed meal (imported rapeseed crushing)	3.2			3.2	3.2	0.0	33.0%	1.05	0.00		
Rapeseed meal (traded as such)		0.3		0.3	0.3	0.0	33.0%	0.10	0.00		
<b>SUNFLOWER MEALS (of which)</b>	<b>5.2</b>	<b>3.3</b>	<b>0.5</b>	<b>8.0</b>	<b>8.0</b>	<b>4.2</b>		<b>2.90</b>	<b>1.51</b>	<b>52%</b>	<b>3%</b>
Sunflower meal (from EU sunflowerseed production)	4.7		0.5	4.2	4.2	4.2	36.0%	1.51	1.51		
Sunflower meal (imported sunflowerseed crushing)	0.5			0.5	0.5	0.0	36.0%	0.19	0.00		
Sunflower meal (traded as such)		3.3		3.3	3.3	0.0	36.0%	1.19	0.00		
<b>OTHER OILSEED MEALS (of which)</b>	<b>0.6</b>	<b>2.1</b>	<b>0.1</b>	<b>2.6</b>	<b>2.6</b>	<b>0.1</b>		<b>0.55</b>	<b>0.05</b>	<b>9%</b>	<b>1%</b>
Palmkern meal	0.0	2.0	0.0	2.0	2.0	0.0	16.0%	0.32	0.00		
Linseed meal	0.4	0.0	0.0	0.5	0.5	0.0	34.0%	0.16	0.00		
Other oilseed meals	0.2	0.1	0.1	0.2	0.2	0.1	37.0%	0.07	0.05		
<b>OTHERS CO-PRODUCTS</b>	<b>34.0</b>	<b>4.0</b>	<b>1.2</b>	<b>36.7</b>	<b>33.1</b>	<b>31.0</b>		<b>4.81</b>	<b>4.53</b>	<b>94%</b>	<b>6%</b>
Starch industry's medium protein products (15-30%)	4.0	0.4	0.5	3.9	4.0	4.0	19.0%	0.76	0.76		
Starch industry's super protein products (60-90%)	1.1	0.0	0.0	1.1	0.7	0.7	73.0%	0.51	0.51		
Distillers' dried grains with solubles	3.4	0.7	0.3	3.8	3.8	3.1	30% wheat 27% maize	1.11	0.93		
Wet distillers' grain	6.8	0.0	0.0	6.8	6.8	6.8	5.4%	0.37	0.37		
Wheat bran	8.3	0.0	0.2	8.1	8.1	8.1	15.5%	1.26	1.26		
Citrus pulp	0.0	0.2	0.0	0.2	0.2	0.0	7.5%	0.02	0.00		
Beet pulp pellets	6.8	1.2	0.1	7.9	7.9	6.7	7.9%	0.62	0.53		
Molasses	3.5	1.5	0.1	4.9	1.6	1.6	10.7% beet 4.2% cane	0.17	0.17		
<b>NON-PLANT SOURCES</b>					<b>8.2</b>	<b>8.0</b>		<b>2.16</b>	<b>2.04</b>	<b>94%</b>	<b>3%</b>
(excluding on-farm use)											
Fish meal	0.5	0.3	0.2	0.6	0.6	0.5	65.0%	0.39	0.30		
Whey powder	2.0	0.1	0.7	1.3	0.6	0.6	12.5%	0.07	0.07		
Skimmed milk powder	1.5	0.0	0.9	0.6	0.1	0.1	34.0%	0.05	0.05		
Processed animal proteins	2.6	0.1	0.8	1.9	1.9	1.8	62.3%	1.18	1.14		
Former foodstuff					5	5	9.5%	0.48	0.48		
<b>ROUGHAGE</b>					<b>1332</b>	<b>1332</b>		<b>38</b>	<b>38</b>	<b>100%</b>	<b>45%</b>
Grass	1019			1019	1019	1019	2.5%	25	25		
Silage maize	247			247	247	247	2.9%	7	7		
Fodder legumes	65			65	65	65	7.2%	5	5		
Dried fodder	3.3	0.0	1.9	1.4	1.4	1.4	17.0%	0.2	0.2		
<b>TOTAL</b>								<b>84</b>	<b>66</b>	<b>78%</b>	

## Legend

Low-Pro: Less than 15% protein content

Medium-Pro: 15-30% protein content

High-Pro: 30-50% protein content

Super-Pro: Over 50% protein content

56.15	54.35	97%
4.46	3.91	88%
21.17	5.50	26%
2.27	1.95	86%

There is only limited inter-changeability between proteins from different categories, for instance between proteins from cereals and proteins from soya meal (due to its amino acid pattern, soya protein is used more efficiently than other plant proteins in animal nutrition).