

Hemp (*Cannabis sativa*)

- In countries where hemp is grown, ***hemp seeds are used in cattle and poultry feeding, as a concentrated energy feed***. Concerning pig and poultry feeds, the very low digestibility of the fibre component of hemp oilcake, limits its use in these species.
- ***The oil cake has been used in fattening cattle*** (up to 3 kg per day) and adult sheep (0.5 kg per day). It is an excellent natural source of rumen-undegradable protein that is equivalent to heat-treated rapeseed meal. When substituted rapeseed meal, hemp seed oil meal included at 20% of diet DM, had no detrimental effects on feed intake or nutrient utilization by sheep.
- ***Hemp seeds have a high energy content***, and due their low cost, are a traditional product for pet bird mixes. Seed-eating migratory birds are attracted to hemp fields at harvest time, and, in many countries, the seeds are being used as poultry feed.

Hemp (*Cannabis sativa*)

| | Unit | seeds | Hemp oil meal (mechanical extraction) | Hemp oil meal (solvent extraction) |
|--------------------------------------|----------|-------|---|--|
| Dry matter | % as fed | 90.6 | 91.9 | 88.7 |
| Crude protein | % DM | 23.9 | 32.3 | 39.2 |
| Crude fiber | % DM | 16.5 | 29.1 | 30.0 |
| NDF | % DM | 39.8 | 48.0 | - |
| ADF | % DM | - | 39.0 | - |
| Ether extract | % DM | 35.7 | 11.3 | 1.9 |
| Lignin | % DM | - | 13.2 | 10.5 |
| Ash | % DM | 5.7 | 8.1 | 19.4 |
| Gross energy | MJ/kg DM | 26.2 | 21.8 | - |
| Calcium | gr/kg DM | 6.1 | 2.8 | - |
| Phosphorus | gr/kg DM | 4.6 | 8.8 | - |
| Magnesium | gr/kg DM | 4.2 | - | - |
| OM digestibility, ruminant | % | 79.8 | 52.7 | - |
| ME ruminants | MJ/kg DM | 82.5 | 52.9 | - |
| Nitrogen digestibility, ruminants | % | 75.3 | 74.0 | - |