

A23K

FODDER

Definition statement

This subclass/group covers:

Feeding-stuffs that are specially adapted, processed or formulated for nonhuman animals

Processes that are specially adapted for production of such animal feeding stuffs

Processes that are specially adapted for preservation of materials (e.g. grass or roots) in order to produce such animal feeding-stuffs

Relationship between large subject matter areas

Animal feeding-stuffs.

This subclass only covers feeding-stuffs that are disclosed as being specially adapted, processed or formulated for non-human animals. Foods or foodstuffs that are of unspecified use or specially adapted for human beings are covered by other subclasses for foodstuffs (see the references below), for example the other subclasses of A23.

Production of animal feeding-stuffs.

Processes for production of foods or foodstuffs that are of unspecified use, or specially adapted for human beings, are covered by the relevant subclasses therefor, see the references below.

Apparatus that is specially adapted for production of animal feeding-stuffs is covered by [A23N 17/00](#).

Mechanical aspects that are of general utility are covered by other subclasses, see the references below.

Preservation of materials in order to produce animal feeding-stuffs.

This subclass only covers processes for preservation that are specially adapted for production of animal feeding-stuffs. Preservation of foods or food-stuffs that are of unspecified use or specially adapted for human beings, are covered by the relevant subclasses therefor, for example [A23B](#) and [A23L 3/00](#) (see the references below).

Mechanical aspects of processes for preservation of materials in order to produce animal feeding-stuffs are classified in other subclasses, for example [A01F 25/00](#) and [F26B](#) (see the references below).

Haymaking

Haymakers, i.e. apparatus for working on mown forage crop lying on the ground with the intention to make hay, are classified in [A01D 76/00](#) – [A01D 84/00](#). Haymakers may include means for mechanical treatment of mown crops in the field, for example for crop-conditioning.

References relevant to classification in this subclass

This subclass/group does not cover:

Mechanical aspects of methods that are specially adapted for storing agricultural or horticultural crops (e.g. in silos)	A01F 25/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus specially adapted for cutting or disintegrating straw, hay or like harvested products of plant origin	A01F 29/00
Manufacture of dairy products	A01J
Animal husbandry; Care of birds, fishes or insects	A01K
Preparation of bait for angling	A01K 97/04
Preservation of plants in general	A01N 3/00
Biocides, pest repellants or pest attractants	A01N 25/00 A01N 65/00
Machines or equipment for making or processing doughs	A21C
Treating of flour or dough	A21D
Processing meat, poultry or fish	A22C
Preserving meat, fish, eggs, fruit, vegetables or edible seeds; The preserved products	A23B
Dairy products; Making dairy products	A23C

Edible oils or fats	A23D
Protein compositions for foodstuffs; Working-up proteins for foodstuffs; Phosphatide compositions for foodstuffs	A23J
Foods or foodstuffs not covered by subclasses A23B to A23J ; Their preparation or treatment	A23L 1/00
Preservation of foods or foodstuffs in general	A23L 3/00
Machines or apparatus for treating harvested fruit or vegetables in bulk, not otherwise provided for	A23N 1/00 A23N 15/00
Apparatus specially adapted for preparing animal feeding-stuffs	A23N 17/00
Shaping or working of foodstuffs	A23P
Veterinary methods	A61D
Medicinal preparations	A61K
Mixing in general	B01F
Disintegrating in general	B02C
Granulating materials	B01J 2/00
Cutting in general	B26D
Presses in general, e.g. for making briquettes	B30B
Polysaccharides; Derivatives thereof	C08B
Derivatives of natural macromolecular compounds	C08H
Producing animal or vegetable oils, fats, fatty substances or waxes	C11B

Preparation of fats, oils, or fatty acids	C11C
Micro-organisms or enzymes; Compositions thereof	C12N
Fermentation or enzyme-using processes to synthesise a desired chemical compound or composition	C12P
Sugar industry	C13
Drying solid materials	F26B

Synonyms and Keywords

In patent documents the expressions "fodder", "feed" and "feedstuff" are often used instead of "feedingstuffs" which is used in the classification scheme of this group.

A23K 1/00

Animal feeding-stuffs (detoxicating or removing bitter tastes from seeds, e.g. lupin seeds for fodder or food A23L1/211)

Definition statement

This subclass/group covers:

Feedstuffs and processes for production in general

A23K 1/001

[N: Shaping or working-up of feeding-stuffs]

Definition statement

This subclass/group covers:

Processes for producing fodders not covered in subgroups, as well as fodders resulting from processes.

A23K 1/002

[N: by agglomeration; by granulation, e.g. making powders]

Definition statement

This subclass/group covers:

Processes for producing fodders by agglomeration, granulation, powdering, as well as granular, powdered fodders resulting from processes.

A23K 1/003

[N: by moulding; by extrusion]

Definition statement

This subclass/group covers:

Processes for producing fodders by molding pressing, extrusions as well as molded, compressed or pressed or extruded fodders resulting from such processes.

A23K 1/004

[N: by encapsulating; by coating]

Definition statement

This subclass/group covers:

- Processes for producing fodders by encapsulating, coating, covering
- coated, covered enveloped fodders resulting from processes

A23K 1/005

[N: Making capsules specially adapted for ruminants]

Definition statement

This subclass/group covers:

Processes for making coatings designed to bypass the rumen and products per se.

A23K 1/006

[N: Animal feeding-stuffs obtained by microbiological or biochemical processes]

Definition statement

This subclass/group covers:

Non-specified microbiological processes for fodder or non-specified addition of microbes in general.

A23K 1/007

[N: by fermentation of natural products, or vegetable or animal offal materials, e.g. biomasses (single cell proteins as additives A23K1/008; live micro-organisms as additives A23K1/009)]

Definition statement

This subclass/group covers:

Use of microorganisms to produce fodder ingredients or fodders (biomass) and the ingredients of fodders per se.

A23K 1/008

[N: Addition of micro-organisms to feeding-stuff compositions, e.g. single cell proteins (biomasses A23K1/007; enzymes A23K1/165)]

Definition statement

This subclass/group covers:

Methods of adding microbes such as probiotics to fodders and the fodders per se.

A23K 1/009

[N: Addition of live micro-organisms to feeding-stuff compositions]

Definition statement

This subclass/group covers:

Methods of adding live microbes such as probiotics to fodders and the fodders per se.

A23K 1/02

from molasses

Definition statement

This subclass/group covers:

Production of fodder from molasses and fodder containing molasses as a significant ingredient.

A23K 1/04

from blood (proteins from blood A23J1/06)

Definition statement

This subclass/group covers:

Production of fodder from blood or blood products and fodder containing these as a significant ingredient.

A23K 1/06

from distillers' or brewers' waste

Definition statement

This subclass/group covers:

Production of fodder from waste products of brewing and distilling (e.g. solubles) and fodder containing same as a significant ingredient.

A23K 1/08

from waste products of dairy plant

Definition statement

This subclass/group covers:

Production of fodder from dairy wastes and fodder containing these as a significant ingredient.

A23K 1/10

from meat, fish, or bones; from kitchen waste

Definition statement

This subclass/group covers:

Production of fodder from animal or waste material in general, and fodders containing same as a significant ingredient.

A23K 1/103

[N: from fish]

Definition statement

This subclass/group covers:

Production of fodder from fish (including shellfish, crustaceans), and fodders containing same as a significant ingredient.

A23K 1/106

[N: from animal offal material, e.g. feathers, bones, skin (from blood A23K1/04)]

Definition statement

This subclass/group covers:

Production of fodder from animal (including fish, etc.) waste material, and fodders containing same as a significant ingredient.

A23K 1/12

from hydrolysates of wood or straw

Definition statement

This subclass/group covers:

Production of fodder from chemical or enzymatic hydrolysates of wood or straw (including lignaceous or cellulosic) material, and fodders containing same as a significant ingredient.

A23K 1/14

from vegetable materials, e.g. potatoes or roots without ensilaging (preserving food A23B, A23L)

Definition statement

This subclass/group covers:

Production of fodder from vegetable material in general (including plant extracts), and fodders containing same as a significant ingredient.

A23K 1/143

[N: from potatoes]

Definition statement

This subclass/group covers:

Production of fodder from potatoes (including by-products), and fodders containing same as a significant ingredient.

A23K 1/146

[N: from vegetable offal material (molasses A23K1/02;

distillers' and brewers' waste A23K1/06; from wood or straw A23K1/12)]

Definition statement

This subclass/group covers:

Production of fodder from vegetable waste material, and foddors containing same as a significant ingredient.

A23K 1/16

supplemented with accessory food factors; Salt blocks [N: (steroids, hormones or enzymes A23K1/165; antibiotics A23K1/17; inorganic additions A23K1/175)]

Definition statement

This subclass/group covers:

Fodder additives , e.g vitamins, amino acids, sugars, enzymes,

A23K 1/1603

[N: Vitamins]

Definition statement

This subclass/group covers:

Addition of vitamin activity including provitamins.

A23K 1/1606

[N: Pigmenting agents]

Definition statement

This subclass/group covers:

Addition of colour to fodder, coloured feed, e.g. brightly coloured food for birds, addition of an compound to feed that will cause a pink colouring to salmon flesh.

A23K 1/1609

[N: Aliphatic or alicyclic compounds]

Definition statement

This subclass/group covers:

Addition of non-aromatic carbon compounds (not including fatty, amino, or heterocyclic, etc. compounds covered by other subclasses).

A23K 1/1612

[N: Aromatic compounds]

Definition statement

This subclass/group covers:

Addition of non-heterocyclic compounds containing at least one benzene ring.

A23K 1/1615

[N: Heterocyclic compounds]

Definition statement

This subclass/group covers:

Addition of heterocyclic compounds in general.

A23K 1/1618

[N: containing oxygen or sulfur as hetero atom]

Definition statement

This subclass/group covers:

Addition of saturated or unsaturated oxo- or sulfo- heterocycles (e.g. oxirane, oxetane, etc., and thirane, thietane, etc., compounds).

A23K 1/1621

[N: Lactones]

Definition statement

This subclass/group covers:

Addition of lactone type cyclic esters.

A23K 1/1625

[N: containing only one nitrogen as hetero atom]

Definition statement

This subclass/group covers:

Addition of saturated or unsaturated single nitrogen containing heterocycles (e.g. aziridine, pyridine, etc.).

A23K 1/1628

[N: containing two hetero atoms of which at least one is nitrogen]

Definition statement

This subclass/group covers:

Addition of saturated or unsaturated heterocycles, with more than one heteroatom and containing at least one nitrogen atom (e.g. oxazepines, thiazepines, pyridazine).

A23K 1/1631

[N: Amino acids; Derivatives thereof, e.g. peptides, proteins]

Definition statement

This subclass/group covers:

Addition of peptide and worked up protein material, including proteolyzates.

A23K 1/1634

[N: Amino acids; Non-polymeric derivatives thereof]

Definition statement

This subclass/group covers:

Addition of amino acids (including esters, salts, etc.).

A23K 1/1637

[N: Nucleic acids; Hydrolysis products or derivatives thereof]

Definition statement

This subclass/group covers:

Addition of nucleic acids and fragments (DNA, RNA, etc.).

A23K 1/164

[N: Fatty acids, fats, oil- or fat-containing products]

Definition statement

This subclass/group covers:

Addition of oils, fats, fatty acids, fatty materials including waxes.

A23K 1/1643

[N: Sugars or polysaccharides]

Definition statement

This subclass/group covers:

Addition of saccharides including simple sugars and starches as well as cellulosic materials.

A23K 1/1646

[N: Other organic substances]

Definition statement

This subclass/group covers:

Addition of organic substances of undefined composition, including mixtures thereof.

A23K 1/165

with steroids, hormones, or enzymes

Definition statement

This subclass/group covers:

Addition of steroids (e.g. cortisone, prednisolone, etc.) and hormones (e.g., growth hormone, oxtocin, etc.) and derivatives.

A23K 1/1653

[N: Enzymes]

Definition statement

This subclass/group covers:

Addition of enzymes (in general and specific).

A23K 1/1656

[N: Pretreatment of feeding-stuffs with enzymes]

Definition statement

This subclass/group covers:

Treating fodder by addition of enzymes (in general and specific) for particular effects.

A23K 1/17

with antibiotics

Definition statement

This subclass/group covers:

Addition of antibiotics per se (not including probiotics - see [A23K 1/008](#)).

A23K 1/175

with inorganic substances; Salt blocks

Definition statement

This subclass/group covers:

Addition of inorganic materials , e.g. metals, salts, gases, etc.

A23K 1/1751

[N: Alkali metal compounds]

Definition statement

This subclass/group covers:

Addition of group 1 elements (Li, Na, K, etc.).

A23K 1/1753

[N: Earth alkali metal compounds]

Definition statement

This subclass/group covers:

Addition of group 2 elements (Be, Mg, Ca, etc.).

A23K 1/1755

[N: Compounds containing phosphorus]

Definition statement

This subclass/group covers:

Addition of organic and inorganic P compounds (e.g. pyrophosphates, etc.).

A23K 1/1756

[N: Silicates, e.g. perlite, zeolite, bentonite]

Definition statement

This subclass/group covers:

Addition of Si compounds (including earths, clays, etc.).

A23K 1/1758

[N: Oligoelements]

Definition statement

This subclass/group covers:

Addition of trace elements (e.g. Fe, Cu, Mn, Zn, Se, I., etc.).

A23K 1/18

**specially adapted for particular animals (milk substitutes
A23C11/00)**

Definition statement

This subclass/group covers:

Feeds adapted for specific animals in general.

A23K 1/1806

[N: for horses]

Definition statement

This subclass/group covers:

Feeds for equine animals (e.g. horses, donkeys, zebra).

A23K 1/1813

[N: for ruminants]

Definition statement

This subclass/group covers:

Feeds for ruminant animals (e.g. cows, goats, sheep, etc.).

A23K 1/182

[N: for birds]

Definition statement

This subclass/group covers:

Feeds for avian animals in general (e.g. pigeons, wild birds, etc.).

A23K 1/1826

[N: for poultry]

Definition statement

This subclass/group covers:

feeds for domesticated farmed avians (e.g. chicken, turkey, geese, duck, etc.).

A23K 1/1833

[N: for monogastric animals]

Definition statement

This subclass/group covers:

Feeds for monogastric animals for which no more suitable class exists (e.g. rabbits, apes, reptiles, etc.).

A23K 1/184

[N: for swine]

Definition statement

This subclass/group covers:

Feeds for suidae (e.g. pig, hog, boar, etc.).

A23K 1/1846

[N: for carnivorous animals, e.g. cats, dogs]

Definition statement

This subclass/group covers:

Feeds for carnivorous animals in general (canines, felines, mink, etc.).

A23K 1/1853

[N: Dry feed]

Definition statement

This subclass/group covers:
0-15% H₂O.

A23K 1/186

[N: Semi-moist feed]

Definition statement

This subclass/group covers:
15-50% H₂O.

A23K 1/1866

[N: Moist feed]

Definition statement

This subclass/group covers:
50-100% H₂O.

A23K 1/1873

[N: for insects, e.g. bees, silk worms]

Definition statement

This subclass/group covers:
Feeds for insects (e.g. honeybees, flies, etc.).

A23K 1/188

[N: for aquatic animals, e.g. fish, crustaceans, molluscs]

Definition statement

This subclass/group covers:
Feeds used in aquaculture in general (including shellfish and marine mammals).

A23K 1/1886

[N: for rodents]

Definition statement

This subclass/group covers:

Feeds for rodents (e.g. mice, rats, hamsters, etc.).

A23K 1/1893

[N: for weanlings]

Definition statement

This subclass/group covers:

Feeds for young animals in general.

A23K 1/22

containing chemicals which are converted to proteins by cattle, e.g. ammonium salts, urea

Definition statement

This subclass/group covers:

Feeds for ruminants which contain nitrogenous protein precursors.

A23K 3/00

Preservation of materials to produce animal feeding-stuffs

Definition statement

This subclass/group covers:

Feedstuffs characterized by preservation method and the feedstuffs per se.

A23K 3/005

[N: Dehydration]

Definition statement

This subclass/group covers:

Feedstuffs characterized by dehydration preservation and the feedstuffs per se.

A23K 3/02

of green fodder (processing and storing A01F25/00; silos E04H)

Definition statement

This subclass/group covers:

Feedstuffs characterized by preservation of green material (grasses, lucerne, etc.) and the feedstuffs per se.

A23K 3/025

[N: Dehydration of green fodder]

Definition statement

This subclass/group covers:

Feedstuffs characterized by dehydration preservation of green material (grasses, lucerne, etc.) and the feedstuffs per se.

A23K 3/03

using chemicals for ensilaging

Definition statement

This subclass/group covers:

Feedstuffs characterized by addition of chemicals (or biochemicals) to produce silage and the silage per se.

A23K 3/035

[N: Ensilage by use of micro-organisms or enzymes]

Definition statement

This subclass/group covers:

Feedstuffs characterized by addition of enzymes and/or microbes to produce silage and the silage per se.