

FREY&LAU 
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PRODUCT LIST
Phytogenic Feed Additives
Essential Oils & Key Chemicals

Phytogenic Feed Additives



Essential Oils	Source	Effect	Species			
						
Cinnamon oil	Cinnamomum zeylanicum	may increase fattening performance	✓	✓		
		may stabilize the intestinal flora	✓	✓		
		may reduce ammonia	✓	✓		
		antimicrobial (Listeria monocytogenes and Salmonella enterica)				✓
Clove oil	Eugenia caryophyllus	may increase fattening performance	✓	✓		
		antimicrobial (E.coli, Listeria monocytogenes and Salmonella enterica)				✓
Eucalyptus oil	Eucalyptus globulus	antimicrobial				✓
Fennel oil	Foeniculum vulgare	may increase fattening performance		✓		
		may improve feed conversion (in combination with organum oil, bay leaf oil, sage oil, myrtle leaf oil, lemon oil and lemon peel oil)				✓
Lemon oil	Citrus x limon	may have an inhibitory effect on fungi, suppresses the formation of aflatoxin (Aspergillus niger and Aspergillus flavus)				✓
		may improve feed conversion (in combination with organum oil, bay leaf oil, sage oil, myrtle leaf oil, fennel seed oil and lemon peel oil)	✓			
		may raise the growth rate (in combination with organum oil, anise oil and lemon peel oil)		✓		✓
Lemongras oil	Cymbopogon citratus/flexuosos	antimicrobial (E.coli)				✓
Litsea cubeba oil	Litsea cubeba	antimicrobial (E.coli)				✓
Orange oil	Citrus x aurantium dulcis	antimicrobial (Campylobacter jejuni)				✓
Origanum oil	Origanum vulgare	may improve feed conversion	✓	✓		
		may increase fattening performance	✓	✓		
		may reduce ammonia	✓	✓		
		antimicrobial (E. coli, Listeria monocytogenes and Salmonella enterica)				✓
		may enhance the oxidation stability of the meat (in combination with rosemary oil)	✓	✓		
Star anise oil	Illicium verum	may increase the milk yield		✓		
		antimicrobial				✓
Thyme oil	Thymus vulgaris/zygis	may improve feed conversion	✓	✓		
		may stabilize the intestinal flora	✓	✓		
		antimicrobial (E.coli, Listeria monocytogenes and Salmonella enterica)				✓

Nature identical versions respectively flavours are available.



Key Chemicals	Source	Effect	Species			
						
Anethole	synthetic or natural (ex Illicium verum)	may reduce ammonia			✓	
Carvacrol	synthetic	may reduce feed expenses	✓	✓		
		antimicrobial (Campylobacter jejuni, E.coli, Listeria monocytogenes and Salmonella enterica)				✓
Cinnamic aldehyde	synthetic	may reduce feed expenses (in combination with Capsaicin and Carvacrol)	✓	✓		
		may reduce ammonia	✓	✓	✓	
		antimicrobial (E.coli, Listeria monocytogenes and Salmonella enterica)				✓
Citral	synthetic or natural (ex Litsea cubeba)	antimicrobial (Campylobacter jejuni, E.coli and Listeria monocytogenes)				✓
d-Carvone	synthetic	antimicrobial (Listeria monocytogenes)				
Eucalyptol	natural (ex Eucalyptus globulus)	antimicrobial				✓
		anti-inflammatory effect (bacteria isolated from diary cows with endometritis)			✓	
Eugenol	natural (ex Eugenia caryophyllus)	may reduce ammonia (in rumen)			✓	
		antimicrobial (Campylobacter jejuni, E.coli, Listeria monocytogenes and Salmonella enterica)				✓
Geraniol	synthetic	antimicrobial (E.coli, Listeria monocytogenes and Salmonella enterica)				✓
Menthol	synthetic or natural (ex Mentha arvensis)	may enhance feed efficiency		✓		
Thymol	synthetic	may stabilize the intestinal flora	✓	✓		
		antimicrobial (Campylobacter jejuni, E.coli, Listeria monocytogenes and Salmonella enterica)				✓

poultry 

pig 

cattle 

in vitro tested 





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