

# Dr. Duke's Phytochemical and Ethnobotanical Databases



## Chemicals and their Biological Activities in: *Cymbopogon flexuosus* (NEES ex STEUDEL) J. F. WATSON (Poaceae) -- East Indian Lemongrass

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### Chemicals

#### ARUNDOIN *Plant*:

No activity reported.

#### BORNEOL *Leaf* 750 - 1,500 ppm

(-)-Chronotropic 29 ug/ml; (-)-Inotropic; Allelochemic; Analgesic; Antiacetylcholine; Antibacterial MIC=125-250 ug/ml; Antibronchitic; Antiescherichic MIC=125 ug/ml; Antifeedant; Antiinflammatory; Antiotitic; Antipyretic; Antisalmonella; Antispasmodic ED50=0.008 mg/ml; Antistaphylococcic MIC=250 ug/ml; Antiyeast; Candidicide; Choleric; CNS-Stimulant; CNS-Toxic; FLavor FEMA<1; Fungicide; Hepatoprotective; Herbicide IC50=470 mM IC50=470 uM; Inhalant; Insect-Repellent; Insectifuge; Irritant; Myorelaxant; Nematicide MLC=1 mg/ml; Perfumery; Pesticide; Sedative; Tranquilizer

#### CITRAL *Leaf* 250 - 4,250 ppm

Allergenic; Antiallergic; Antianaphylactic; Antibacterial; Antihistaminic; Antiseptic 5.2 x phenol; Antishock; Barbituate-Synergist; Bronchorelaxant; Cancer-Preventive; Expectorant; FLavor FEMA 4-170; Fungicide MIC 625 ug/ml; Glaucomagenic; Herbicide IC50=115 uM; Nematicide IC52=100 ug/ml MLC=100-260 ug/ml; Perfumery; Pesticide; Prostatitigenic 185 mg/kg/day/3 ms; Sedative ED 1-32 mg/kg; Teratogenic; Trichomonocidic LD100=150 ug/ml; Tyrosinase-Inhibitor ID50=1.5 mM

#### CITRONELLAL *Leaf*:

Acaricide; Allergenic; Antibacterial; Antiseptic 3.8 x phenol; Antistaphylococcic; Antistreptococcic; Candidicide; Embryotoxic; FLavor FEMA <1; Fungicide; Insectifuge; Irritant; Motor-Depressant; Mutagenic?; Nematicide MIC 1 mg/ml; P450-2B1-Inhibitor IC50=1.56 uM; Perfumery; Pesticide; Sedative ED=1 mg/kg; Teratogenic

#### DIPENTENE *Leaf*:

Allergenic; Antibacterial; Antiviral; Expectorant; Irritant; Pesticide; Sedative

#### FARNESOL *Leaf*:

Allergenic; Antiadenomic; Anticancer (Pancreas) IC50=39 uM; Anticarcinomic (Colon); Anticarcinomic (Lung); Antileukemic; Antimelanomic IC50=50 uM/l; Antispasmodic; Apoptotic; FLavor FEMA 0.1-3; Juvabional; Nematicide MLC=100

ug/ml; Perfumery; Pesticide; Pheromonal; Sedative; Trichomonicide *LD100=100 ug/ml*

**GERANIOL *Plant* 875 - 2,500 ppm**

Allergenic; Anthelmintic; Antibacterial *MBC=800 ug/ml MIC=400 ug/ml MIC=64 ug/ml*; Anticancer (Pancreas) *IC50=265 uM*; Anticariogenic *MIC=400 ug/ml*; Antimelanomic *IC50=150 uM/l*; Antisalmonella *MIC=400 ug/ml*; Antiseptic 400-800 ug/ml 7 x phenol *MIC=64 ug/ml*; Antispasmodic; Antitubercular; Antitumor; Antitumor (Pancreas) *IC50=265 uM*; Ascaricide; Cancer-Preventive; Candidicide; CNS-Stimulant; Embryotoxic; Emetic 3 x *ippecac*; Expectorant; FLavor *FEMA 1-10*; Fungicide *IC93=2 mM*; Herbicide *IC100=2,000 uM*; Insectifuge 50 ppm; Insectiphile; Mycobactericide *MIC=64 ug/ml*; Nematicide *IC86=100 ug/ml MLC=1,000 ug/ml*; Perfumery; Pesticide; Sedative; Trichomonicide *LD100=300 ug/ml*

**GUANIC-ACID *Leaf*:**

No activity reported.

**HEPTENOL *Leaf*:**

No activity reported.

**LIMONENE *Plant*:**

Acaricide *LC100=8 uM*; AChE-Inhibitor; Allelochemic; Allergenic *1/20th carene*; Antiacetylcholinesterase *IC22-26=1.2 mM*; Antiadenomic; Antialzheimeran?; Antiasthmatic; Antibacterial; Anticancer; Antiesophagitic; Antifeedant; Antiflu; Antiinflammatory; Antilithic; Antilymphomic; Antimetastatic (Stomach); Antimutagenic; Antiobesity; Antiseptic; Antispasmodic *ED50=0.197 mg/ml*; Antitumor; Antitumor (Breast); Antitumor (Colon); Antitumor (Pancreas); Antitumor (Prostate); Antitumor (Stomach); Antiviral; Apoptotic; Bronchoprotectant; Cancer-Preventive; Candidistat; Chemopreventive; Cholesterolytic; Detoxicant; Enterocontractant; Expectorant; FLavor; Fungiphilic; Fungistat; GST-Inducer; Herbicide *IC50=45 uM*; Histaminic; Immunomodulator; Insecticide *0.37 uM/fly*; Insectifuge; Interleukin-6-Inhibitor; Irritant; Lipolytic; Myorelaxant 50 mg/kg; Nematicide *IC=100 ug/ml*; NO-Genic; Ornithine-Decarboxylase-Inhibitor *~750 mg/kg (diet)*; Ozone-Scavenger; P450-Inducer; Peristaltic; Pesticide; Photosensitizer; Sedative *ED=1-32 mg/kg*; Transdermal

**METHYL-EUGENOL *Plant* 500 - 1,000 ppm**

Anesthetic; Antibacterial; Anticonvulsant; Antidote (Strychnine); Antifeedant; Antioxidant *EC50=100 ul/l*; Antiradicular; Antiseptic; Cancer-Preventive; Carcinogenic; FLavor *FEMA 5-15*; Fungicide; Fungistat 100 ug/mL; Insectifuge; Myorelaxant; Narcotic; Nematicide *MIC=1 mg/ml*; Perfumery; Pesticide; Sedative

**METHYL-HEPTENOL *Plant*:**

No activity reported.

**MYRCENE *Plant*:**

ACE-Inhibitor 100 ug/ml; Aldose-Reductase-Inhibitor; Allergenic; Analgesic; Antibacterial; Anticonvulsant; Antimutagenic; Antinitrosaminic; Antinociceptive 10-20 mg/kg *ipr mus* 20-40 mg/kg *scu mus*; Antioxidant; Antispasmodic; Chemopreventive; FLavor *FEMA 0.5-9*; Fungicide; Hypothermic; Insectifuge; Irritant; Myorelaxant 100-200 mg/kg; P450-2B1-Inhibitor *IC50=0.14 uM*; Perfumery; Pesticide

**N-DECANAL *Leaf*:**

FLavor *FEMA <1-4*

**N-DECYLALDEHYDE *Leaf:***

No activity reported.

**TRIACONTANE *Plant:***

No activity reported.

**TRIACONTANOL *Plant:***

Antidermatitic?; Antiherpetic?; Antiinflammatory?