A Reference Source for Analgesia & Analgesics in Animals

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Table of Contents
Preface

One of the major requirements of the Animal Welfare Act is to ensure that steps are taken to minimize pain and distress in animals insofar as allowed by the approved research protocol. Exceptions to this requirement must be scientifically justified by the investigator, in writing, and approved by the Institutional Animal Care and Use Committee (IACUC). (Section 13 (a)(3)). One of the methods used to accomplish this requirement is the provision of adequate veterinary care for the animals including the appropriate use of anesthetics, analgesics, tranquilizers or euthanasia.

The Animal Welfare Information Center (AWIC) was established by the 1985 amendments to the Act (Sect. 13(c)) and is required, by law, to provide specific information to the research community. As stated above, one of these requirements is minimizing pain or distress in the animals used in research when possible. This publication provides a list of published reference sources on analgesia and the use of analgesics in animals. While this publication is not meant to be a complete resource on the subject of analgesia and analgesics in animals it is hoped that it will be useful to those involved with animal research and will be of assistance to the investigators, veterinarians, and in the reduction of pain and distress to these animals.

Richard L. Crawford, DVM
USDA, NAL, AWIC

General

NAL Call no: SF915.J6 1988
Descriptors: laboratory animals, wild animals, domestic animals, drugs, antagonists.

NAL Call no: SF605.N672
Descriptors: pain management, options, overview.

NAL Call no: 472 N21
Descriptors: pain initiation, control.

NAL Call no: QL55.A1L3
Descriptors: experimental animals, euthanasia.

NAL Call no: QL55.A1L3
Descriptors: experimental animals, euthanasia, laboratory animals.

NAL Call No: SF605.N672
Descriptors: pain, control, relief.

NAL Call no: SF601.C66
Descriptors: over-the-counter-drugs, analgesics, respiratory, dermatologic.

NAL Call no: QP451.4.A54
Descriptors: alleviation of pain, species differences.

Descriptors: postoperative analgesia, opioid.

ISSN: 0306-9877.
Descriptors: anesthesia, spinal-epidural, combined.

NAL Call no: HV4711.A587 1997
Descriptors: animals, pain, trauma.

NAL Call no: QL55.A1L3
Descriptors: laboratory animals, local anaesthetics, ointments, lidocaine.

NAL Call no: QL55.15
Descriptors: laboratory animals, anaesthetics, breathing, techniques.

NAL Call no: QL55.15
Descriptors: laboratory animals, pain, improvement, analgesics, anesthetics.

NAL Call no: QL55.A1L3
Descriptors: pain, distress, assessment, alleviation, animals.

Descriptors: anaesthesia, methods, laboratory animals, anaesthetic administration, dosage.

NAL Call no: QP601.M49
Descriptors: anaesthesia, administration, dosage, animals, surgery.

NAL Call no: 41.8 M69
Descriptors: pain management, profit, service.

NAL Call no: SF914 B25 1999
Descriptors: small animal, anaesthesia, analgesia.

NAL Call no: SF605.N672
Descriptors: epidural, analgesia, anesthetic.


NAL Call no: SF605.N672
Descriptors: analgesia, therapy, critical ill.

NAL Call no: SF601.V523
Descriptors: pain, surgical, oncology, management.

NAL Call no: SF994.A95 1997
Descriptors: anesthesia, analgesia.

NAL Call no: SF601.V523
Descriptors: anesthesia, analgesia, principles, exotic practice.

NAL Call no: SF605.N672
Descriptors: analgesics, market.

NAL Call no: SF601.C66
Descriptors: carprofen, analgesics.

NAL Call no: SF996.5.A54 1997
Descriptors: laboratory animals, analgesia, anesthesia.

NAL Call no: SF601.C66
Descriptors: skin, analgesia, transdermal fentanyl.

Descriptors: sex differences, nmda antagonists, morphine, analgesia.

NAL Call no: SF605.N672
Descriptors: pain, neurophysiology, acupuncture.

NAL Call no: SF605.N672
Descriptors: trauma, surgery, analgesia.
NAL Call no: SF605.N672
Descriptors: trauma, surgery, analgesia.

NAL Call no: SF601.V523 v.29 no.3
Descriptors: clinical anesthesia, pain.

NAL Call no: RS122.A3
Descriptors: tenidap, analgesia, antiinflammatory.

NAL Call no: QL750.A6
Descriptors: pain, control, large animals, drugs.

Descriptors: analgesia, effect, enhancement, spinal anesthesia.

NAL Call no: SF911.S45
Descriptors: analgesic drugs, therapy, principles.

NAL Call no: SF911.S45
Descriptors: local, regional, anesthesia, analgesia.

NAL Call no: SF911.S45
Descriptors: understanding pain, management, advances.


NAL Call no: SF601.V523
Descriptors: pain, management.


Descriptors: pain control, small animals.


NAL Call no: QL750.A6

Descriptors: pain perception in animals, fundamentals.


NAL Call no: SF405.5.A23

Descriptors: post-operative, analgesics, evaluation, pain.


NAL Call no: 470 Sci2

Descriptors: nonopioid, pain, animal tests.


NAL Call no: SF601.C66

Descriptors: xylazine sedation, antagonized, tolazoline.


Descriptors: pain management, small animals.


Descriptors: chordates, vertebrates, mammals.


NAL Call no: QL55.A1L3

Descriptors: laboratory animals, anaesthesia, man.

Amphibians & Reptiles

Aguilar, N.G.; Palcios, C.A.M.; Ross, L.G., (1999), Controlled anaesthesia of Rana catesbeiana (Shaw) and Rana pipiens (Schreber) using xylocaine delivered by spray. *Aquaculture Research.* v. 30 (4), p. 309-311. ISSN: 1355-557X.
NAL Call no: SH1.F8
Descriptors: frog, anesthesia.

NAL Call no: 41.8 V641
Descriptors: lizards, Sauria, reptiles, anaesthesia.

NAL Call no: SF405.5 A3
Descriptors: analgesics, anaesthesia, pain, cold-blooded vertebrates.

NAL Call no: 396.8 J82
Descriptors: analgesia, amphibians, alpha andrenergic agents.

NAL Call no: SF914.A53 1990
Descriptors: anesthesia, amphibians, reptiles.

NAL Call no: QP901.C6
Descriptors: frogs, barbiturate anesthesia, responses.

Descriptors: Rana pipiens, tadpoles, anesthetic, stauroporine.

Descriptors: injectable anaesthetics, benzimidazole, anaesthesia, turtles.

NAL Call no: SF601.J6
Descriptors: amphibian, pain, analgesia.

NAL Call no: SF601.I4
Descriptors: reptiles, anesthesia, intravenous injection, inhaled anesthetics.

NAL Call no: RM1.C5
Descriptors: non-opioid analgesic, frog poison.

NAL Call no: Film S-1779
Descriptors: amphibian, morphine analgesia, effects.

Descriptors: amphibians, local anesthetics, frog.

NAL Call no: SF406.C35 1992
Descriptors: amphibians, reptiles, fish, laboratory animals.

NAL Call no: QP901.E8
Descriptors: supraspinal opioids, analgesia, amphibians.

NAL Call no: 396.8 J82
Descriptors: analgesia, potency, opioids, amphibians.


NAL Call no: QL1.D48 v. 27
Descriptors: alternative model, pain, amphibians, analgesics.

Stevens, Craig W.; Kirkendall, Kenan, (1993), *Time course and magnitude of tolerance to the analgesic effects of
NAL Call no: 442.8 L62

Descriptors: amphibians, tolerance, morphine.

NAL Call no: QP901.P4
Descriptors: amphibians, analgesia, stress.

NAL Call no: 396.8 J82
Descriptors: analgesic potency, mu, delta and kappa opioids, amphibians.

NAL Call no: QP901.E8
Descriptors: analgesia, amphibians, spinal, adrenergic agents.

NAL Call no: 470 Sci2
Descriptors: pain, nonopioid, animals.

NAL Call no: QP901.P4
Descriptors: frogs, analgesia, opioids, hypothermia.

NAL Call no: SF405.5.A23
Descriptors: analgesic effects, xylazine, flunixin, frogs.

NAL Call no: 442.8 L62
Descriptors: amphibians, opioids, effects.

NAL Call no: 442.8 L62
Descriptors: amphibians, opioid, adrenergics, effects.

Return to: Title Page / Table of Contents
Avian

Descriptors: chickens, medetomidine, fentanyl, combination.

ISSN: 0236-6290.
NAL Call no: 41.8 AC83
Descriptors: injectable anaesthetics, dosage, ketamine, peafowl.

NAL Call no: 410 Z73
Descriptors: birds, avian, analgesics.

NAL Call no: QL55.I5
Descriptors: anaesthesia, analgesia, drug combinations, avian species.

NAL Call no: SF914.A53 1990
Descriptors: birds, laboratory animals, anesthesia.

NAL Call no: 410 J825
Descriptors: avian, chemical irritants, prostaglandin, analgesics.

NAL Call no: SF996.Z66 1999
Descriptors: birds, avian, analgesia.

Descriptors: birds, analgesia, avian.

NAL Call no: 41.8 Am3A
Descriptors: chickens, opium alkaloids, analgesics, drug combinations.

Cooper, J.E.; Frank, L., (1973), Use of the steroid anaesthetic CT 1341 in birds. *Veterinary Record*. 1973, v. 92 (18),
NAL Call no: 410 Z73
Descriptors: isoflurane, butorphanol, flunixin, Psittiformes.

NAL Call no: SF911.V43
Descriptors: anaesthesia, inhaled, isoflurane, cockatoos.

NAL Call no: SF605.A4
Descriptors: anesthesia, companion birds.

NAL Call no: QP351.N3
Descriptors: chicken, analgesia.

NAL Call no: QP901.P4
Descriptors: articular pain, domestic fowl, opioid.

NAL Call no: HV4701.A557
Descriptors: birds, animal welfare, pain.

NAL Call no: 41.8 AU72
Descriptors: analgesia, chickens, beak trimming.

Descriptors: pigeons, fentanyl, morphine treatment.

NAL Call no: SF994.A95 1997
Descriptors: avian, anesthesia, analgesia.

NAL Call no: 41.8 R312
Descriptors: local analgesics, pretreatment, domestic fowl, articular pain.

NAL Call no: 41.8 V641
Descriptors: anaesthesia, owls, Strigiformes.

Descriptors: morphine, hypo and hyperalgesia, domestic fowl.

NAL Call no: QP351.B45
Descriptors: naloxone, pain perception, heat, fowl.

NAL Call no: QP901.P4
Descriptors: morphine, heat, pain perception, analgesia, fowl.

Descriptors: poultry, ketamine, medetomidine, injectable anaesthetics.

Descriptors: anesthesia, ducks, intravenous.

NAL Call no: 41.8 V641
Descriptors: carprofen, chickens, lameness, analgesia.

NAL Call no: 41.8 Am3A
Descriptors: chicken, ketamine, dose response.

Descriptors: analgesics, drug combinations, chickens.

Paul-Murphy, J.R.; Brunson, D.B.; Miletic, V., (1999), Analgesic effects of butorphanol and bupranorphine in...
NAL Call no: 41.8 Am3A
Descriptors: analgesics, African grey parrots.

NAL Call no: 41.8 Am3A
Descriptors: analgesia evaluation, conscious perching birds.

Descriptors: pain, analgesia, drugs, birds.

Descriptors: analgesics, pigeons, discrimination learning.

NAL Call no: 41.8 AM3A
Descriptors: ketamine, great horned owls, response, anaesthesia.

NAL Call no: 310.9 P94
Descriptors: butorphanol, anesthetic, turkeys.

NAL Call no: SF601.A47
Descriptors: anesthesia, broiler chickens.

Descriptors: ketamine, diazepam, combination, chickens, anaesthetic.

NAL Call no: QP1.P4
Descriptors: morphine, dose, hyperalgesia, domestic fowl.

Language: German.
NAL Call no: QL55.Z46
Descriptors: anaesthesia, analgesics, birds, injectable, inhaled.

Bovine

Descriptors: epidural xylazine, ketamine, hind quarter analgesia, cow calves.

NAL Call no: 41.8 Am3A
Descriptors: ibuprofen, mastitis, dairy cows.

NAL Call no: SF779.5.A1B6
Descriptors: anesthesia, cattle, regional and local analgesia.

NAL Call no: 41.8 IN2
Descriptors: clinical effects, triflupromazine, detomidine, deoni calves.

NAL Call no: 41.8 Am3A
Descriptors: analgesia, epidural, medetomidine, cows.

NAL Call no: QP1.P4
Descriptors: amniotic fluid ingestion, effect, nociception, cows.

NAL Call no: SF601.C24
Descriptors: nociceptive response, morphine, cattle.

NAL Call no: 41.8 R312
Descriptors: regional analgesia, anti-inflammatory analgesia, effects, cortisol, calves.

NAL Call no: SF604.I45
Descriptors: regional analgesia, adjuvants, bovine.

NAL Call no: SF604.I45
Descriptors: caudal epidural analgesia, xylazine, dairy cattle.

NAL Call no: SF961.A5
Descriptors: analgesia, bovine, butorphanol.

NAL Call no: 41.8 AM3A
Descriptors: effects, epidural, intramuscular, detomidine, cattle.

NAL Call no: SF601.I45
Descriptors: chloral hydrate, anesthesia, neonatal calves.

NAL Call no: 41.8 IN22
Descriptors: epidural detomidine, reversal, sahiwal calves.

NAL Call no: SF604.I45
Descriptors: blood gas studies, xylazine, analgesia, calves.

NAL Call no: 41.8 V641
Descriptors: paravertebral analgesia, improvement.

Rushen, J.; Boissy, A.; Terlouw, E.M.C.; de-Passille, A.M.B., (1999), Opioid peptides and behavioral and
NAL Call no: 49 J82
Descriptors: opioid peptides, behavior, physiology, dairy cows.

NAL Call no: SF915.J63
Descriptors: pharmacokinetics, detomidine, cow, horse.

NAL Call no: 41.8 AM3A
Descriptors: xylazine, cisapride, naloxone effect, iliocecocolic area, cows.

NAL Call no: SF55.I4J68
Descriptors: epidural xylazine, analgesic, sedative, cows.

NAL Call no: 41.8 M69
Descriptors: epidural xylazine, surgical analgesia, bovine udder.

Return to: Title Page / Table of Contents

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**Dogs and Cats**

NAL Call no: 41.8 Au72
Descriptors: pain management, dogs, cats, nonsteroidal anti-inflammatory analgesics.

NAL Call no: 41.8 IN22
Descriptors: epidural ketamine, hind quarter analgesia, dogs.

NAL Call no: 41.8 IN22
Descriptors: analgesic, sedative, effects, dogs, anaesthesia.
NAL Call no: 41.8 IN22
Descriptors: analgesia, cardiopulmonary, effects, pethidine, medetomidine, dog.

NAL Call no: 41.8 IN2
Descriptors: epidural anaesthesia, ketamine, dogs.

NAL Call no: 41.8 V643
Descriptors: muscle damage, dogs, intramuscular drugs.

NAL Call no: SF915.J63
Descriptors: carprofen,, halothane, dogs.

NAL Call no: 41.8 IN22
Descriptors: medetomidine, pentazocine, atropinized dogs.

NAL Call no: 41.8 IN2
Descriptors: diazepam, ketamine, intranasal, analgesia, pups.

NAL Call no: 41.8 IN22
Descriptors: changes, medetomidine, pethidine, neuroleptanalgesia, dogs.

NAL Call no: 41.8 IN2
Descriptors: effects, epidural ketamine, analgesia, dogs.

NAL Call no: SF915.J63
Descriptors: dexmedetomidine, medetomidine, intramuscular, cats.

Language: French.
NAL Call no: 41.8 R24
Descriptors: ketoprofen, flunixin, musculo-skeletal disorders, dog.

NAL Call no: 41.8 J8292
Descriptors: carprofen, pethidine, postoperative analgesic, cat.

NAL Call no: 41.8 AM3A
Descriptors: analgesic effects, morphine, rectal, intramuscular, intravenous, dogs.

NAL Call no: 41.8 J8292
Descriptors: medetomidine, butorphanol, sedation, dogs.

NAL Call no: 41.8 J8292
Descriptors: medetomidine/pethidine combination, sedation, pre-anaesthetic, dogs.

NAL Call no: 41.8 AM3
Descriptors: sedation, skin testing, flea allergy, dogs.

NAL Call no: SF910.P34A55 1992
Descriptors: analgesia assessment, catecholamine, onychectomy, cats.

NAL Call no: SF911.V43
Descriptors: postoperative, analgesia, onychectomy, cats.

NAL Call no: SF911.V43
Descriptors: stress, dog, medetomidine.

NAL Call no: SF604.K42
Descriptors: xylazine effect, anaesthesia, dogs.

NAL Call no: 41.8 IN22
Descriptors: effects, analgesics, dogs.

NAL Call no: SF604.I45
Descriptors: analgesic response, ketamine anaesthesia, dogs.

NAL Call no: SF605.N672
Descriptors: analgesia, onychectomy, cats.

NAL Call no: 396.8 J82
Descriptors: effects, dexamedetomidine, dog.

Language: German.
NAL Call no: 41.8 Z5 SUPPL
Descriptors: long-term anesthesia, bupivacaine, morphine, effect, dog.

NAL Call no: 447.8 J825
Descriptors: opioid pharmacodynamics, neonatal dogs.

NAL Call no: SF915.J63
Descriptors: analgesia duration, epidural, morphine, medetomidine, dogs.

NAL Call no: SF911.V43

Descriptors: anti-nociceptive effects, cats, oxymorphone/butorphanol/acepromazine.

NAL Call no: 41.8 R3224
Descriptors: pain, small animals, treating.

NAL Call no: SF915.J63
Descriptors: preoperative morphine, postoperative buprenorphine, analgesia, dogs.

NAL Call no: SF915.J63
Descriptors: pharmacokinetics, midazolam, ketamine, dogs.

NAL Call no: SF911.V43
Descriptors: pain relief, ear canal ablation, dogs.

NAL Call no: 41.8 Am3
Descriptors: analgesia evaluation, postoperative butorphanol, cats.

NAL Call no: 41.8 M69
Descriptors: management, perioperative pain.

NAL Call no: RS122.A115
Descriptors: dogs, sustained release butorphanol.

NAL Call no: SF601.C66
Descriptors: current treatment, degenerative joint disease.

NAL Call no: 41.8 J8292
Descriptors: medetomidine, sedative, analgesic, reversal, dog.
Descriptors: analgesia, dogs, buprenorphine, bupivacaine.

Descriptors: over the counter human medications, small animals.

Descriptors: femoral nerve block, postoperative analgesia, dogs.

Descriptors: medetomidine, dogs, cats, review.

Cullen, L.K., (1999), Xylazine and medetomidine in small animals: These drugs should be used carefully. Australian Veterinary Journal. Nov. 1999, v. 77 (11), p. 722-723. ISSN: 0005-0423. NAL Call no: 41.8 AU72
Descriptors: xylazine, medetomidine, small animals.

Descriptors: respiratory actions, dogs, morphine.

Descriptors: vascular effects, isoflurane, propofol, dogs.

Descriptors: morphine, bupivacaine, pulmonary function, dogs.


Descriptors: methadone, premedicant, cats.

NAL Call no: 41.8 J8292
Descriptors: cardiovascular changes, medetomidine, ketamine, cats.

NAL Call no: SF910.P34A55 1992
Descriptors: epidural opioid, postoperative pain, dog.

NAL Call no: 41.8 R3224
Descriptors: analgesics, dogs, cats, postoperative, use.

NAL Call no: 41.8 R3224
Descriptors: postoperative, analgesics, dogs, cats.

NAL Call no: SF915.J63
Descriptors: sustained release morphine, dogs, pharmacokinetics.

NAL Call no: 41.8 AM3A
Descriptors: preanesthetic medication, endoscopic intubation, dogs, duodenum.

NAL Call no: SF911.V43
Descriptors: analgesia, fentanyl, medetomidine, lumbosacral epidural, cats.

NAL Call no: SF601.A47
Descriptors: naproxen, toxicosis, puppy.

NAL Call no: 41.8 R3224
Descriptors: update, butorphanol, small animals.
NAL Call no: SF911.V43
Descriptors: fentanyl, plasma concentration, patch sizes, dogs.

NAL Call no: 41.8 V6456
Descriptors: toxic hazards, cats.

Descriptors: toxicity, sufentanil, dogs.

NAL Call no: 41.8 Am3
Descriptors: scale, evaluation, postoperative pain, dogs.

NAL Call no: QL55.A1L3
Descriptors: epidural opioid, pain relief, dog.

NAL Call no: QL55.A1L3
Descriptors: long-term anesthesia, dog, alfentanil, midazolam.

NAL Call no: QL55.A1L3
Descriptors: dogs, postoperative care, analgesics.

NAL Call no: QL55.A1L3
Descriptors: dogs, anaesthetics, lung transplantation, cardiovascular system.

NAL Call no: 41.8 R312
Descriptors: plasma cortisol, bitches, halothane, butorphanol.

Fox, S.M.; McGrath, C.J.; Radasch, R.J., (1998), **Managing pain in the orthopedic patient.** *Proceedings of the North
NAL Call no: 41.8 AM3
Descriptors: carprofen, pain, treatment, dogs.

Descriptors: propofol, dogs, diaphragmatic contractility.

NAL Call no: 41.8 AM3
Descriptors: propofol-isoflurane, anesthesia, dogs, cesarean section.

NAL Call no: 41.8 M69
Descriptors: postoperative pain management, dogs, cats.

Language: German.
NAL Call no: 41.8 Z5 SUPPL.
Descriptors: long-term anesthesia and analgesia, bupivacaine, morphine, dog.

NAL Call no: 41.8 AM3A
Descriptors: cardiovascular effects, dogs, butorphanol, halothane anesthesia.

NAL Call no: 41.8 AM3A
Descriptors: nonresponse to stimulus, butorphanol, medetomidine, isoflurane, dogs.

NAL Call no: SF915.J63
Descriptors: thiopental, medetomidine, butorphanol, atropine, beagle dogs.

A Reference Source for Analgesia & Analgesics in Animals, AWIC Series 2000-02

NAL Call no: 41.8 AM3
Descriptors: ketoprofen, carprofen, dogs, orthopedic surgery, postoperative pain.

Language: Danish.
NAL Call no: 41.9 D23
Descriptors: acute pain, treatment, cats, dogs.

NAL Call no: 41.8 AM3A
Descriptors: analgesics, effect of gastroesophageal sphincter pressure, dogs.

NAL Call no: SF991.A1C3
Descriptors: premedication, canine, anesthesia.

NAL Call no: SF915.J63
Descriptors: assessment method, anesthesia, dog.

NAL Call no: SF605.N672
Descriptors: management, postoperative pain, dogs.

NAL Call no: SF605.N672
Descriptors: analgesics, severely ill dogs.

NAL Call no: SF601.C66
Descriptors: analgesia, therapy.

NAL Call no: 41.8 AM3
Descriptors: use of analgesics in dogs.

NAL Call no: SF601.V523
Descriptors: osteoarthritis, cats, management.

NAL Call no: SF910.P34A55 1992
Descriptors: anesthesia, pain control, eye surgery.

NAL Call no: SF601.P76
Descriptors: anesthesia, head and neck surgery.

NAL Call no: 41.8 AM3
Descriptors: hematologic abnormalities, chronic acetaminophen administration, dog.

NAL Call no: 41.8 AM3
Descriptors: analgesics, postoperatively, small animal intensive care.

NAL Call no: SF604.J342
Descriptors: sedation, medetomidine, midazolam, butorphanol, combinations, dogs.

NAL Call no: SF601.C66
Descriptors: bupivacaine, lumbosacral epidural analgesia.

NAL Call no: 41.8 M69
Descriptors: postoperative discomfort, dogs, cats.

NAL Call no: SF601.C66
Descriptors: postsurgical pain, dogs, cats.

NAL Call no: 41.8 Am3
Descriptors: postoperative analgesia, dogs, epidural administration.

NAL Call no: 41.8 R3224
Descriptors: postoperative urinary retention, dog, morphine, bupivacaine.
NAL Call no: 41.8 AM3
Descriptors: acetaminophen, toxicosis, dogs, cats.

NAL Call no: 41.8 AM3
Descriptors: pharmacology, butorphanol, dogs, cats.

NAL Call no: 442.9 SO1
Descriptors: dose response, intravenous butorphanol, dogs.

NAL Call no: QP451.4.A54
Descriptors: pain, control, dogs, cats.

Descriptors: spinal block, intrathecal ketamine, dogs.

NAL Call no: 41.8 AM3A
Descriptors: alfentanil, rabbits, sheep, dogs.

NAL Call no: SF601.C66
Descriptors: carprofen.

NAL Call no: SF601.A47
Descriptors: ibuprofen, serum concentration, toxicity, canine.

NAL Call no: 41.8 Am3A
Descriptors: cardiorespiratory effects, glycopyrrolate-butorphanol-xylazine combination, dogs.

James, A.E., (1995), The laboratory cat. *Australian and New Zealand Council for the Care of Animals in Research*
NAL Call no: SF405.5.A3
Descriptors: laboratory, cat.

NAL Call no: SF601.C66
Descriptors: postoperative management, spinal surgery, canine.

NAL Call no: SF601.C66
Descriptors: assessing, managing, acute pain, dogs, cats.

NAL Call no: SF601.V523
Descriptors: canine osteoarthritis, management, non-steroidal anti-inflammatory drugs.

NAL Call no: SF774.5.V48 1994
Descriptors: veterinary nursing, animal nursing.

NAL Call no: 41.8 S08
Descriptors: ketamine, dogs, burn wounds.

NAL Call no: SF911.S45
Descriptors: sedation, chemical restraint, dog, cat.

NAL Call no: 41.8 IN2
Descriptors: effects, epidural xylazine-diazepam, dogs.

NAL Call no: SF601.P76
Descriptors: acupuncture, surgical analgesia.


Descriptors: effects, medetomidine, dogs.
NAL Call no: 41.8 V6425
Descriptors: acute postoperative pain, management, dogs, cats.

NAL Call no: 41.8 IN2
Descriptors: neuroleptanalgesics, preanaesthetics, dogs, thiopentone.

NAL Call no: 41.8 R312
Descriptors: transdermal fentanyl, oxymorphone, post-operative behavior, dogs.

NAL Call no: SF601.C66
Descriptors: transdermal fentanyl.

NAL Call no: SF911.S45
Descriptors: chronic pain, osteoarthritis, cancer.

NAL Call no: 41.8 AM3A
Descriptors: transdermal fentanyl, dogs, disposition.

NAL Call no: SF601.I4
Descriptors: analgesia, cats.

NAL Call no: 41.8 J8292
Descriptors: carprofen, analgesia, cats, post-operative pain.

NAL Call no: 41.8 V641
Descriptors: postoperative analgesic, sedation, dogs, carprofen.

Descriptors: pain, hypersensitivity, pethidine.

Lascelles, B. Duncan X.; Cripps, Peter J.; Jones, Alan; Waterman, Pearson Avril E., (1998), *Efficacy and kinetics of*
NAL Call no: SF911.V43
Descriptors: carprofen, pain, preoperatively, postoperatively.

NAL Call no: 396.8 J82
Descriptors: opioid analgesia, neonatal dogs, morphine, fentanyl.

Descriptors: synergistic, antinociceptive, sevoflurane, fentanyl, dogs.

NAL Call no: SF895.P76
Descriptors: periosteal nociception, cat, evaluation.

NAL Call no: SF911.V43
Descriptors: hemodynamic effects, epidural ketamine, isoflurane, dogs.

NAL Call no: 41.8 Am3A
Descriptors: cardiovascular effects, buprenorphine, anesthetized dogs.

NAL Call no: QD415.A1X4
Descriptors: new analgesic, cizolirtine, effect in rat and dog.

NAL Call no: SF910.5.V4
Descriptors: acute pain management, dog, cats, non-steroidal anti-inflammatory analgesics.

NAL Call no: SF601.C66
Descriptors: acute pain, dogs, cats, management.

NAL Call no: 41.8 R3224
Descriptors: pain management, dogs, cats.

NAL Call no: 41.8 R3224
Descriptors: drug comparison, post operative pain control, dogs.

NAL Call no: SF910.5.V4
Descriptors: acute pain management, dogs, cats.

NAL Call no: 41.8 R3224
Descriptors: nephrotoxicity, dogs, methoxyflurane, flunixin meglumine.

NAL Call no: SF915.J63
Descriptors: carprofen, pharmacodynamics, pharmacokinetics, dog.

NAL Call no: SF601.V523
Descriptors: postoperative analgesia.

Descriptors: thoracic epidural block, dogs, perfusion.

NAL Call no: 41.8 Am3
Descriptors: effects, medetomidine, butorphanol, middle aged and old dogs.

NAL Call no: SF601.C66
Descriptors: cardiovascular disease, dogs, cats, anesthesia.

NAL Call no: RS1.A7
Descriptors: analgesia activity, dog, monkey.
NAL Call no: 41.8 V641
Descriptors: effects, carprofen, papaveretum, dog.

NAL Call no: SF991.088 1995
Descriptors: small animals, thoracic surgery.

NAL Call no: SF911.S45
Descriptors: analgesia drug therapy, principles.

NAL Call no: SF604.I45
Descriptors: effects, detomidine, diazepam, dogs.

NAL Call no: SF911.V43
Descriptors: analgesia, dogs, thoracotomy, morphine vs. bupivacaine.

NAL Call no: SF911.B56
Descriptors: intraoperative, postoperative pain.

NAL Call no: SF911.S45
Descriptors: local, regional, anesthesia, analgesia.

Language: Spanish with a summary in English and German.
NAL Call no: 41.8 Z5
Descriptors: effects, fentanyl, pentazocin, flunitrazepam, analgesia, dog.

Language: Spanish with a summary in English.
NAL Call no: SF604.A75
Descriptors: analgesia, dogs, fentanyl, flunitrazepam.

NAL Call no: SF601.C24
Descriptors: medetomidine, fentanyl-droperidol, dogs, analgesia, sedation.

NAL Call no: 41.8 Am3
Descriptors: postoperative pain, dogs, drug comparison.

NAL Call no: 41.8 M69
Descriptors: butorphanol, cats, pain management.

NAL Call no: SF601.P7
Descriptors: acute ibuprofen toxicity, dogs.

NAL Call no: SF911.V43
Descriptors: epidural vs. intramuscular, oxymorphone, analgesia, dogs.

NAL Call no: SF601.C66
Descriptors: pain, analgesia, dogs, cats.

NAL Call no: 41.8 IN2
Descriptors: effect, medetomidine, dogs.

NAL Call no: 41.8 Am3A
Descriptors: drug effects, reversibility, dogs.

Language: French.
Descriptors: medetomidine-midazolam-butorphanol, anesthetic, dogs.

NAL Call no: SF601.C66
Descriptors: dogs, reducing postoperative pain, techniques.


NAL Call no: SF604.I45
Descriptors: analgesia, dogs, bupivacaine and amyl alcohol.


NAL Call no: 41.8 IN2
Descriptors: pharmacokinetics, dogs, ibuprofen.


NAL Call no: 41.8 J8292
Descriptors: postoperative analgesia, sedation, flunixin, papaveretum, dog.


NAL Call no: 41.8 R3224
Descriptors: abscess, discospondylitis, dog, epidural analgesia.


NAL Call no: 41.8 AM3A
Descriptors: histamine release, morphine, oxymorphone, dogs.


NAL Call no: SF601.A5
Descriptors: transdermal fentanyl vs. epidural morphine, analgesia, dogs.


NAL Call no: 41.8 Am3A
Descriptors: acetaminophen toxicosis, cats.


Descriptors: sufentanil, alfentanil, morphine, dogs, spinal delivery.


NAL Call no: SF601.C66
Descriptors: pain in animals, control.
NAL Call no: SF915.J63
Descriptors: medetomidine, agonist action, dog.

NAL Call no: SF911.V43
Descriptors: analgesia, stifle surgery, intra-articular.

Language: Netherlandish.
NAL Call no: 41.8 T431
Descriptors: dental surgery, dogs, medetomidine and ketomine.

NAL Call no: SF601.A5
Descriptors: cats, visceral analgesia.

NAL Call no: SF914.A53 1990.
Descriptors: induction, maintenance, isoflurane, cats.

NAL Call no: SF601.A5
Descriptors: analgesia, behavior, cat, butorphanol, nalbuphine, pentazocine.

NAL Call no: QL750.A6
Descriptors: pain control, small animals.

NAL Call no: SF914.A53 1990
Descriptors: analgesics, post-surgical pain, dogs, cats.

NAL Call no: 41.8 AM3A
Descriptors: analgesia, behavioral responses, dogs.
NAL Call no: 41.8 AM3A
Descriptors: dose response, butorphanol, dogs, nociceptive threshold.

Descriptors: pretreatment, dexmedetomidine, altered indices anesthetic depth, halothane.

NAL Call no: 41.8 IN2
Descriptors: comparative evaluation, ocular anaesthesia, canines.

NAL Call no: 41.8 M69
Descriptors: pain relief, pre-anesthetic, postoperative, comparisons.

NAL Call no: 41.8 IN2
Descriptors: clinical evaluation, xylazine, ketamine, canines.

NAL Call no: 41.8 V641
Descriptors: drug comparison, postoperative analgesia, cat.

NAL Call no: 41.8 Am3A
Descriptors: postoperative indicators of pain, cat, clinical correlation.

NAL Call no: SF915.J63
Descriptors: inhibition of gastric acid secretion, dogs, detomidine.

Descriptors: inhaled anesthetics influence, pharmacodynamics, morphine.

NAL Call no: SF915.J63
Descriptors: morphine-isoflurane, dogs, swine, rhesus monkeys.

Descriptors: opioid analgesia, peripheral mechanisms.

NAL Call no: 41.8 Am3A
Descriptors: cardiorespiratory effects, acepromazine, buprenorphine, dogs.

NAL Call no: 41.8 J8292
Descriptors: analgesia, acupuncture, thoracolumbar disc disease, dogs.

NAL Call no: 41.8 Am3A
Descriptors: pulmonary functions, thoracotomy, dogs, analgesics.

Descriptors: dogs, bucal absorption, fentanyl.

NAL Call no: SF911.A1C3
Descriptors: tolerance, piroxicam, dogs.

NAL Call no: SF915.J63
Descriptors: morphine, sustained release, dogs.

NAL Call no: SF601.I4
Descriptors: analgesia, dog, cat.

NAL Call no: 41.8 J8292
Descriptors: post-operative analgesia, dog, buprenorphine, pentazocine.


NAL Call no: 41.8 Am3A
Descriptors: analgesia, cardiorespiratory effects, anesthetized dogs.

NAL Call no: SF915.J63
Descriptors: pharmacokinetics, butorphanol, anesthetized dogs.

NAL Call no: SF602.M8
Descriptors: analgesia, epidural, dog, cat.

NAL Call no: 41.8 Am3
Descriptors: sedative and analgesic effects, medetomidine, xylazine, dogs.

NAL Call no: 41.8 AM3
Descriptors: cardiovascular effects, butorphanol, isoflurane-02, dogs.

NAL Call no: 41.8 J8292
Descriptors: antagonist, atipamezole, cats.

NAL Call no: SF915.J63
Descriptors: atipamezole, antagonist, dog.

NAL Call no: QL55.A1L3
Descriptors: post-thoracotomy pain, dog, medetomidine.

NAL Call no: 41.8 V641
Descriptors: drug combinations, anesthesia, cats.

NAL Call no: 41.8 V64
Descriptors: drug comparison, ovariectomy, cats.

NAL Call no: SF911.V43
Descriptors: post-operative analgesics, cardiopulmonary effects, dogs, clinical study.

NAL Call no: SF601.A47
Descriptors: ibuprofen, aspirin, acetaminophen, toxicosis, cats.

NAL Call no: 41.8 M69
Descriptors: butorphanol, analgesic, dogs, cats.

Language: Polish.
NAL Call no: 41.8 M463
Descriptors: analgesia, old dogs and cats.

NAL Call no: SF910.P34.A55 1992
Descriptors: opioids, post-operative analgesia, dog.

NAL Call no: SF991.A3
Descriptors: analgesia, dogs, cats.

NAL Call no: 41.8 Au72
Descriptors: anti-inflammatory drugs, analgesic drugs, dogs, cats.

NAL Call no: SF601.C66
Descriptors: analgesics, feline medicine.

NAL Call no: SF601.A5
Descriptors: wound irrigation, bupivacaine, postoperative analgesia, cat.

Descriptors: chronically administered neostigmine, rats, dogs.

Descriptors: epidurally, sustained release, morphine, dogs.

Equine

NAL Call no: SF951.E62
Descriptors: chloral hydrate, sedative, horses.

NAL Call no: SF601.I4
Descriptors: palpebral nerve blocks, horse.

NAL Call no: 41.8 M69
Descriptors: critical care, horses, restraint, analgesia, anti-inflammatory.

NAL Call no: SF951.E62
Descriptors: analgesic effect, ketoptofen, equine colic.

NAL Call no: SF601.C24
Descriptors: analgesia, abdominal pain, ponies.

NAL Call no: 41.8 V641
Descriptors: sedation, horses, romifidine, butorphanol.

NAL Call no: 41.8 AM3A
Descriptors: comparative analgesia, horse, dental.

NAL Call no: 41.8 AM3A
Descriptors: dental, horse, analgesia.

NAL Call no: SF955.E6
Descriptors: cardiopulmonary effects, foal, xylazine.

NAL Call no: 41.8 R312
Descriptors: detomidine analgesia, horse, tendon injury.

NAL Call no: SF915.J63
Descriptors: ketoprofen, rectal administration, horses, bioavailability.

Language: French.
NAL Call no: SF601.C24
Descriptors: caudal epidural anesthesia, mare.

NAL Call no: 41.8 AU72
Descriptors: prokinetic drugs, postoperative ileus, horses.

ISSN: 0193-1903.
NAL Call no: SF601.C66
Descriptors: detomidine, equine, sedation, analgesia.

NAL Call no: 41.8 R312
Descriptors: spasmolytic analgesics, equine, motility small intestine.

NAL Call no: SF911.V43
Descriptors: sedation, gastric emptying, ponies.

NAL Call no: SF951.E62
Descriptors: anesthesia, horses.

NAL Call no: SF601.I4
Descriptors: hind limb lameness, local analgesics.

NAL Call no: SF601.I4
Descriptors: hind limb lameness, local analgesic.

NAL Call no: SF601.A46
Descriptors: responses to analgesia, navicular bursa, interphalangeal joint, horses.

NAL Call no: SF955.E6
Descriptors: response to analgesia, navicular bursa, interphalangeal joint, horses.

NAL Call no: 41.8 V643
Descriptors: agonists, horses, review.

NAL Call no: SF911.V43
Descriptors: proximal palmar metacarpal analgesia, horses, methods.
NAL Call no: SF951.V47
Descriptors: chemical restraint, analgesia, horse.

NAL Call no: SF951.E62
Descriptors: xylazine, butorphanol, field use, horses.

NAL Call no: S539.7.C6
Descriptors: spasmolytic analgesia drugs, small intestine function, horses.

NAL Call no: 41.8 M69
Descriptors: butorphanol, analgesic, equine colic pain.

NAL Call no: SF911.V43
Descriptors: ketamine, perineal analgesia, horse.

NAL Call no: SF951.E62
Descriptors: epidural analgesia, equine surgeries,

NAL Call no: SF951.E62
Descriptors: anesthesia, equine, neurologic disease.

NAL Call no: 41.8 Am3
Descriptors: analgesics comparison, horses.

NAL Call no: 41.8 V641
Descriptors: sedative and analgesic effects, detomidine, romifidine, horses.

NAL Call no: SF601.A46
Descriptors: sedation, analgesia, domosedan, dose, duration of effects, horse.
NAL Call no: SF601.C66
Descriptors: pain management, horses, colic.

NAL Call no: SF951.V47 v.10 no.3
Descriptors: emergency analgesia, chemical restraint, horse.

NAL Call no: 41.8 AM3A
Descriptors: effects, analgesics, after exercise, horses.

NAL Call no: SF951.J65
Descriptors: drug comparison, flank laparotomies, mares.

NAL Call no: SF951.J65
Descriptors: detomidine, dose, sedative, analgesic, colic, horses.

NAL Call no: SF601.A46
Descriptors: domosedan, sedative, analgesic, horses, introduction.

NAL Call no: 41.8 V641
Descriptors: postoperative analgesia, horses.

NAL Call no: SF911.V43
Descriptors: effects, electroencephalogram, ketamine, halothane, equine.

NAL Call no: 41.8 V6456
Descriptors: detomidine, sedative, horses.

Kalpravidh, M.; Lumb, W.V.; Wright, M.; Heath, R.B., (1984), Analgesic effects of butorphanol in horses: Dose-
NAL Call no: 41.8 AM3A
Descriptors: butorphanol, analgesic effects, horses, dose response.

NAL Call no: SF955.E6
Descriptors: narcotic analgesics, detection, pain measurement, horse, review.

NAL Call no: SF910.P34A55 1992
Descriptors: acupuncture, pain control, surgical analgesia.

NAL Call no: 41.8 Am3A
Descriptors: combination detomidine/butorphanol, effect on respiratory function, horses.

NAL Call no: 41.8 AM3
Descriptors: epidural xylazine, perineal analgesia, horses.

NAL Call no: SF915.P5366
Descriptors: chemical restraint, large animals.

NAL Call no: SF601.A46
Descriptors: analgesia and sedative effects, detomidine, colic, duration.

NAL Call no: QP451.4.A54
Descriptors: analgesic drugs, horses, evaluation.


NAL Call no: 41.8 AC87
Descriptors: effects, additional premedication, romifidine-ketamine, horses.

NAL Call no: SF955.E6
Descriptors: low dose butorphanol/halothane, alveolar concentration, ponies.

NAL Call no: SF911.V43
Descriptors: detomidine-propofol anesthesia, abdominal surgery, horses.

NAL Call no: SF601.A46
Descriptors: detomidine, clinical evaluation, equine reproductive surgery.

NAL Call no: 41.8 Am3A
Descriptors: analgesic effects on duodenal activity, equine.

NAL Call no: 41.8 Am3A
Descriptors: evaluation or quality of anesthesia, horses, arthroscopic surgery.

NAL Call no: SF915.J63
Descriptors: inflammation, disposition, phenylbutazone, horses.

NAL Call no: 41.8 AM3A
Descriptors: metabolism, endotoxic horses, flunixin, phenylbutazone.

NAL Call no: 41.8 AM3A
Descriptors: drug combination, effects, cardiorespiratory, horses.

NAL Call no: SF955.E6
Descriptors: chronic hoof pain/lameness, ketoprofen, phenylbutazone, horses.

NAL Call no: 396.8 J82
Descriptors: analgesia, detomidine, evaluation, pain, horses.

NAL Call no: SF915.J63
Descriptors: alfentanil activity, horse.

NAL Call no: SF915.J63
Descriptors: eltenac, anti-inflammatory, analgesic, horses.

NAL Call no: SF915.J63
Descriptors: antinociceptive/sedative effect, amitraz, horses.

NAL Call no: SF911.V43
Descriptors: pain/analgesia assessment, horses, arthroscopic surgery.


Language: French.

NAL Call no: SF910.P34A55 1992

Descriptors: pain, detection models, horse.
NAL Call no: SF951.E62
Descriptors: equine pain, prevention, control.

NAL Call no: SF601.A46
Descriptors: equine practice, sedation, analgesia, anesthesia.

NAL Call no: SF910.P34A55 1992
Descriptors: adrenoreceptor agonist, analgesia, central nervous system, equine.

NAL Call no: SF601.A46
Descriptors: detomidine response, horses.

NAL Call no: SF601.A46
Descriptors: cardiovascular/pulmonary function, detomidine, horses.

NAL Call no: SF951.E62
Descriptors: pain prevention/control, analgesics, anti-inflammatory drugs, horses.

NAL Call no: 41.8 AM3A
Descriptors: effects, xylazine/ketamine, glycopyrrolate, horses.

NAL Call no: SF910.P34A55 1992
Descriptors: physiologic response, detomidine in horses, xylazine in cattle.

NAL Call no: 41.8 AM3A
Descriptors: spinal fluid concentrations, analgesics, cows, horses.

A Reference Source for Analgesia & Analgesics in Animals, AWIC Series 2000-02

NAL Call no: 41.8 AM3A
Descriptors: plasma concentrations, mepivacaine, horse.

NAL Call no: 41.8 AM3A
Descriptors: atipamezole, detomidine, mares.

NAL Call no: 41.8 AM3A
Descriptors: effects, yohimbine, postural changes, detomidine, mares.

NAL Call no: 41.8 AM3A
Descriptors: butorphanol, arterial pressure, jejunal blood flow, ponies.

NAL Call no: 41.8 S08
Descriptors: cardiovascular, respiratory, effects, detomidine, horses.

NAL Call no: SF911.V43
Descriptors: effects, long-term catheterization, morphine-detomidine, horses.

NAL Call no: SF911.V43
Descriptors: epidural, morphine-detomidine, hindlimb lameness, horses.

NAL Call no: 41.8 AM3A
Descriptors: cardiovascular/pulmonary function, normal horses, chronic obstructive pulmonary disease.

NAL Call no: 41.8 R312
Descriptors: ponies, intravenous analgesics, cardiopulmonary and endocrine effects.
NAL Call no: SF955.E6
Descriptors: chemical restraint, horse, standing horse.

NAL Call no: SF601.A46
Descriptors: injectable anesthesia, horses, pain.

NAL Call no: 41.8 N812
Descriptors: horses, anesthesia, injectable anesthesia.

NAL Call no: 41.8 AM3A
Descriptors: effects. sedation, anesthesia, intubation, respiratory mechanics, horses.

NAL Call no: 41.8 IN2
Descriptors: evaluation, xylazine, donkey, sedative.

NAL Call no: SF915.J63
Descriptors: ponies, anesthesia, phenylbutazone, thiamylal.

Return to: Title Page / Table of Contents

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**Ferrets**

NAL Call no: SF601.A5
Descriptors: evaluation, analgesic combinations, ferret.

NAL Call no: SF601.A5
Descriptors: drug combinations, ferret, anesthetic, cardiorespiratory.

NAL Call no: SF601.A5
Descriptors: drug combinations, anesthesia, ferret.

NAL Call no: SF601.A5
Descriptors: drug combinations, sedative, cardiorespiratory, ferrets.

NAL Call no: SF605.A5
Descriptors: drug effects, ferret, analgesics.

NAL Call no: 410.9 P94
Descriptors: tiletamine, zolazepam, anesthetic, ferrets.

Return to: Title Page / Table of Contents

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**Fish/Crabs/Snails/Shrimp/Molluscs/Shellfish**

Akhlaghi, M.; Mirab-Brojerdi, M., (1999), *Anesthetic effect of clove tree and LC sub(50) determination in rainbow trout (Oncorhynchus mykiss)*. *Journal of the Faculty of Veterinary Medicine*. University of Tehran. v. 54 (2), p. 52-57. ISSN: 1022-646X.
Descriptors: clove tree, anesthetic, trout.

NAL Call no: SH157.7.I58 no. 47
Descriptors: quinaldine anesthetic, fish.

NAL Call no: 414.9 AM3
Descriptors: anesthetics, ornamental fish, etomidate.

NAL Call no: SH219.N66
Descriptors: anesthesia, rainbow trout, swimming.
Language: French; NAL Call no: SH1.B78
Descriptors: anesthesia, stress, trout.

NAL Call no: 41.8 ON1
Descriptors: electronarcosis, fish, anaesthetic.

NAL Call no: SH1.C32
Descriptors: anaesthetics, Salmonidae.

NAL Call no: QL614.J68
Descriptors: anaesthesia, rainbow trout, respiration.

NAL Call no: SH1.A6
Descriptors: anesthesia, squid, transportation.

NAL Call no: QL55.A1L3
Descriptors: anaesthesia, circulation, fish.

NAL Call no: SF601.V523
Descriptors: tropical fish, anesthesia.

NAL Call no: QL55.A1L3
Descriptors: anesthesia, recirculating systems.

NAL Call no: QP901.C6
Descriptors: oxygen consumption, anesthetic, ketamine, fish.

NAL Call no: SH1.A6
Descriptors: anesthetics, lidocaine, fish.

Descriptors: tropical fish, anesthesia, cold.

NAL Call no: SH1.A6
Descriptors: oysters, anaesthesia.

NAL Call no: SH157.7.I58 no. 87
Descriptors: Benzocaine, anesthetic, fish.

NAL Call no: QP901.P4
Descriptors: naloxone, analgesia, pain perception.

Descriptors: anaesthesia, Pinctada, oysters, MS 222.

NAL Call no: QL76.5 U6A472
Descriptors: anesthetics, fish, quinaldine.

NAL Call no: QL336.Z6
Descriptors: benzocaine, freshwater fish, anesthetic.

NAL Call no: QP901.C6
Descriptors: anaesthetics, marine molluscs, squid.

NAL Call no: SH157.7.I58 no.49
Descriptors: quinaldine, fish, anesthetic.

Descriptors: anaesthetics, octopuses.

NAL Call no: SH1.A6
Descriptors: anesthetics, salmonids, ketamine hydrochloride.

NAL Call no: QH541.5.W3A6
Descriptors: benzocaine, catfish, disposition.

NAL Call no: SH1.A6
Descriptors: anaesthesia, scallop.

NAL Call no: 41.8 J27
Descriptors: carp, anesthesia.

NAL Call no: SH1.N66
Descriptors: hypothermia, salmon, anesthesia.

NAL Call no: SH157.7.I58 no. 29.
Descriptors: salmonids, anesthesia, methylpentynol.

NAL Call no: SH1.S48
Descriptors: sodium bicarbonate, sulfuric acid, anesthesia, fish.

NAL Call no: 470 C16D
Descriptors: anesthetics, fish, mykiss, effects.

NAL Call no: SH219.N66
Descriptors: anesthesia, fish, fish biology.

Kavaliers, M; Ossenkopp, K.P., (1993), Repeated naloxone treatments and exposure to weak 60-Hz magnetic fields have analgesic effects in snails. *Brain research*. v. 620 (1), p. 159-162, ill. ISSN: 0006-8993.
NAL Call no: Film S-1779
Descriptors: naloxone, magnetism, snails, analgesia.

NAL Call no: QP552.N39C65 1990
Descriptors: opioids, analgesia, molluscs.
NAL Call no: 500 N484
Descriptors: analgesia, stress, slug.

NAL Call no: QH301.C63
Descriptors: odours, analgesia, snail.

NAL Call no: QP1.P4
Descriptors: analgesia, novelty induced, snail.

NAL Call no: Film S-1779
Descriptors: stress-induced analgesia, snail.

NAL Call no: SH1.F8
Descriptors: anaesthetics, effects, rainbow trout.

Descriptors: anaesthesia, lake trout, MS 222.

Descriptors: gold fish, electrodes.

NAL Call no: SF605.N672
Descriptors: fishes, surgical operations, anesthesia.

NAL Call no: SH156.9.L46 1993
Descriptors: stiped bass, anesthetics.

NAL Call no: QL639.1.158 1994
Descriptors: stress, anaesthesia, carbon dioxide.

NAL Call no: QP33.J68
Descriptors: morphine, naloxone, shrimp, effect.

NAL Call no: SH1.A6
Descriptors: anaesthetics, Hippoglossus, halibut.

NAL Call no: SH157.7.I48 no. 48
Descriptors: toxicity, quinaldine sulfate, fish.

NAL Call no: SH1.A6
Descriptors: fish larvae, anesthetics, survival.

NAL Call no: SH1.A6
Descriptors: anesthesia, cod, metomidate.

NAL Call no: SH1.A6
Descriptors: benzocaine, trout, pharmacokinetics.

NAL Call no: SH365.A1J6
Descriptors: oysters, anesthesia.

NAL Call no: SH138.S64 no. 10
Descriptors: laboratory culture, stress, anaesthesia, trout.

NAL Call no: QL614.J68
Descriptors: anaesthesia, marine fish.

NAL Call no: SH1.A6
Descriptors: anaesthetics, stress, salmon.

Descriptors: anesthesia, electrical, salmonids.

NAL Call no: QL614.Z44
Descriptors: benzocaine, anaesthesia, fish.

NAL Call no: SH219.N66
Descriptors: anesthesia, clove oil, sodium bicarbonate, fish.

NAL Call no: 157.5 P94
Descriptors: anesthesia, fish, etomidate.

NAL Call no: 157.5 P94
Descriptors: carbonic acid, anesthetics.

NAL Call no: SH219.N66
Descriptors: anesthesia, Pisces, sodium bicarbonate.

NAL Call no: QL614.J68
Descriptors: chemoreception, anaesthetics, salmon.

NAL Call no: SH156.9.R6 1984
Descriptors: fish, anaesthetic, sedative.

NAL Call no: QP901.C6
Descriptors: fish physiology, anaesthetics.

NAL Call no: SH157.7 no. 22
Descriptors: quinaldine, anesthetic, fish.

NAL Call no: SF601.V535
Descriptors: fishes, anesthesia.

NAL Call no: QP901.C6
Descriptors: anaesthetics, fish.

Smith, D.A.; Smith, S.A.; Holladay, S.D., (1999), Effect of Previous Exposure to Tricaine Methanesulfonate on
NAL Call no: SH171.J68
Descriptors: hybrids, anesthesia, fish, tolerance.

Descriptors: clove oil, anaesthetic, fish.

NAL Call no: SH1.F8
Descriptors: anaesthetics, sedatives, fish.

NAL Call no: SH219.N66
Descriptors: anesthesia, coho salmon, electrical.

Descriptors: anaesthesia, lobster, transport.

NAL Call no: TC1505.P33 1995
Descriptors: anesthetic, fish.

NAL Call no: QP1.P4
Descriptors: magnetic fields, analgesia, snail.

NAL Call no: Film S-1779
Descriptors: analgesia, crab.

Descriptors: medetomidate, anesthetic, fish.

NAL Call no: SH138.W62
Descriptors: anesthesia, induction, recovery, catfish.

NAL Call no: SH1.F8
Descriptors: gold fish, anesthetic.
NAL Call no: SF380.I52
Descriptors: goats, ketamine, xylazine, epidurally, effects.

NAL Call no: SF915.J63
Descriptors: acetaminophen, metabolites, goat, desert camel.

NAL Call no: 41.8 IN2
Descriptors: goats, medetomidine, pentazocie, analgesia.

NAL Call no: SF601.V46
Descriptors: goats, regional analgesia, limbs, surgery.

NAL Call no: SF601.I45
Descriptors: lignocaine, ketamine, goats, analgesia.

NAL Call no: SF601.C66
Descriptors: sheep, goats, anesthesia, analgesics.

NAL Call no: 410.9 P94
Descriptors: stress, hormones, response. butorphanol, goats.

NAL Call no: 41.8 AM3
Descriptors: anesthetic effects, goats, tiletamine, zolazepam, butorphanol.

NAL Call no: 41.8 AM3A
Descriptors: fentanyl, goats, intravenous, transdermal, pharmacokinetics.

NAL Call no: 41.8 IN2
Descriptors: goats, diazepam, ketamine, alpha 2 agonists.

NAL Call no: SF601.B6
Descriptors: goats, analgesics, adverse effects.

NAL Call no: SF601.B6
Descriptors: anesthesia, goats, tiletamine, zolazepam.

NAL Call no: SF601.V535
Descriptors: sheep, goats, anesthesia, analgesics.

NAL Call no: SF911.V43
Descriptors: epidural, morphine, pain, goats, abdominal surgery.

NAL Call no: 41.8 Z5
Descriptors: goats, xylazine, medetomidine, effects.

NAL Call no: 410.9 P94
Descriptors: goats, methadone, dosage, pharmacokinetics.

NAL Call no: SF604.I45
Descriptors: goats, detomidine, xylazine, analgesia, comparison.

NAL Call no: SF380.I52
Descriptors: kids, anesthetics, analgesics, physiological functions.

NAL Call no: 41.8 Z5
Descriptors: goats, xylazine, lidocaine, analgesia, effects.

NAL Call no: SF380.I52
Descriptors: female goats, medetomidine, clinicophysiological effects.

NAL Call no: SF604.J342
Descriptors: goats, xylazine, effects, pregnant goats.

NAL Call no: SF601.I4
Descriptors: anesthesia, sheep, goats, analgesics, complications.
Guinea Pigs

Descriptors: ethanol, morphine metabolism, guinea pig.

NAL Call no: SF405.5.A23
Descriptors: surgical procedures, injectable anesthetics, analgesics.

NAL Call no: QP351.N48
Descriptors: nervous system, disease.

NAL Call no: 410.9.P94
Descriptors: catheters, analgesics, female guinea pigs.

Descriptors: infant guinea pigs, meperidine, intrapartum.

Descriptors: beta adrenoceptors, propofol, general anesthesia.

NAL Call no: 396.8 J82
Descriptors: opioid receptors, tolerance, guinea pig.

Murphy, Laine J.; Olsen, George D., (1994), Diffusion of morphine-6-beta-D-Glucuronide into the Neonatal Guinea
**Mice**

NAL Call no: QP1.C55
Descriptors: sex differences, gonadectomy, morphine, mice.

NAL Call no: 450 F55
Descriptors: analgesic, rotundifolone, rodents.

NAL Call no: QP1C6
Descriptors: propofol, pain, mice, action.
NAL Call no: 442.8 F71
Descriptors: buprenorphine, haematology, mice.

NAL Call no: QP351.N3
Descriptors: magnetic field effect, mice, stress induced analgesia.

NAL Call no: RM1.C63
Descriptors: clebopride, mouse, antinociceptive effects.

NAL Call no: 396.8 B77
Descriptors: morphine modulation, nitric oxide, mouse.

NAL Call no: 442.8 L62
Descriptors: analgesia, mice.

NAL Call no: R41.B52
Descriptors: anti-inflammatory, analgesic activity, mice.

Cao, Bo Jin; Li Wei, Ping, (1994). **Buspirone and 1-(2-pyridimidinyl)-piperazine attenuate xylazine-induced antinociception in the mouse.** *Journal of Pharmacy and Pharmacology.* v. 46 (11), p. 931-932. ISSN: 0022-3573.
NAL Call no: RS11.J6
Descriptors: mouse, xylazine, antinociception.

Descriptors: morphine, analgesic effects, somatostatin-antagonist.

NAL Call no: QP901.E8
Descriptors: methadone, analgesia, morphine, cxbk mice.

Descriptors: morphine, analgesic effects, mice.

Descriptors: kin interaction, morphine analgesia, male mice.


NAL Call no: 512 SO2
Descriptors: albino mice, acetaminophen, effect.

NAL Call no: 512 SO2
Descriptors: cimetidine, acetaminophen, analgesia, mice.

Duttaroy, Alokesh; Kirtman, Randi; Farrell, Frank; Phillips, Mark; Phillipe, Jacques; Monderson, Thesselon; Yoburn, Byron C., (1997), **The effect of cumulative dosing on the analgesic potency of morphine in mice.** **Pharmacology, Biochemistry and Behavior.** v. 58 (1), p. 67-71. ISSN: 0091-3057.
NAL Call no: QP901.P4
Descriptors: morphine, mice, cumulative dosing.

Duttaroy, Alokesh; Gregorio, Glen; Shah, Sukrut; Shen, Ji; Philippe, Jacques; Monderson, Thesselon; Yoburn, Byron C., (1998), **Acute ethanol exposure decreases the analgesic potency of morphine in mice.** **Life Sciences.** v. 62 (2), p. 35-41. ISSN: 0024-3205.
NAL Call no: 442.8 L62
Descriptors: ethanol, analgesic potency, mice.

NAL Call no: QP901.E8
Descriptors: transgenic mice, opioid analgesia, differences.

Descriptors: fentanyl, pain, mice.

Descriptors: propofol, ethanol, anesthetic, mouse.

NAL Call no: 396.8 J82
Descriptors: butorphanol, mice, effects, mu receptors.

Goicoechea, Carlos; Ormazabal, M. Jesus; Abalo, Raquel; Alfaro, M. Jose; Martin, M., (1999), **Calcitonin reverts pertusis toxin blockade of the opioid analgesia in mice.** **Neuroscience Letters.** v. 273 (3), p. 175-178. ISSN: 0304-3940.
NAL Call no: QP351.N3
Descriptors: calcitonin, pertusis toxin blockade, opioid analgesia, mice.

Grant, Gilbert J.; Cascio, Martin; Zakowski, Mark I.; Langerman, Lev; Turndorf, Herman, (1995), **Intrathecal administration of liposomal morphine in a mouse model.** **Anesthesia and Analgesia.** v. 81 (3), p. 514-518. ISSN: 0003-2999.
Descriptors: intrathecal, morphine, mouse.

Inoue, Makoto; Nakayamada, Hiroyuki; Tokuyama, Shogo; Ueda, Hiroshi, (1997), **Peripheral non-opioid analgesic effects of kyotorphin in mice.** **Neuroscience Letters.** v. 236 (1), p. 60-62. ISSN: 0304-3940.
NAL Call no: QP351.N3
Descriptors: non-opioid effects, kyotorphin, mice.
Issartel, Veronique; Courdert, Pascal; Rubat, Catherine; Nhamias, Solange; Couquelet, Jacques, (1998), Synthesis of thiazolotriazine derivatives and their antinociceptive effects in mice. *Journal of Pharmacy and Pharmacology*. v. 50 (6), p. 575-582. ISSN: 0022-3573.
NAL Call no: RS11.J6
Descriptors: thiazolotriazine, synthesis, antinociceptive effects, mice.

NAL Call no: 442.8 IN2
Descriptor: sumatriptan, antinociceptive effect, mice.

Descriptors: sch 32615, analgesia, mice.

Descriptors: doxapram, acetaminophen toxicity, mice.

NAL Call no: QP901.E8
Descriptors: dihydroetorphine, mice, antinociceptive.

NAL Call no: QP901.E8
Descriptors: matrine, mice, antinociceptive effects.

NAL Call no: Film S-1779
Descriptors: stress, opioid, analgesia, deer mice.

NAL Call no: QP351.N3
Descriptors: morphine dependence, mice, selective breeding.

NAL Call no: QP901.E8
Descriptors: heroin, morphine, mu receptors, knockout mice.

NAL Call no: 396.8 J82
Descriptors: topical opioids, reversal, antagonist, mice.
NAL Call no: 442.8 L62
Descriptors: peripheral orphanin, analgesia, mouse.

NAL Call no: RM1.C63
Descriptors: circadian rhythm, mice, pain.

NAL Call no: QP901.E8
Descriptors: effects, methamphetamine, cocaine, morphine, mice.

Li, Jin; Li, Xin; Pei, Gang; Qin, Bo Yi, (1999), Analgesic effect of agmatine and its enhancement on morphine analgesia in mice. *Acta Pharmacologica Sinica*. v. 20 (1), p. 81-85. ISSN: 0253-9756.
Descriptors: agmatine, morphine, enhancement, mice.

Loh, Horace H.; Liu, Hsien Ching; Cavalli, Antonella; Yang, Wanling; Chen Yuh Fung; Wei, Li Na, (1998), Mu opioid receptor knockout in mice: Effects on ligand-induced analgesia and morphine lethality. *Molecular Brain Research*. v. 54 (2), p. 321-326. ISSN: 0169-328X.
Descriptors: mu opioid receptors, mice, analgesia.

NAL Call no: QL55.A1L3
Descriptors: mice, analgesics, pain, behavior, experiments.

NAL Call no: QP901.E8
Descriptors: morphine, analgesia, tolerance, mice.

NAL Call no: QP552.N39N48
Descriptors: analgesia, morphine, pain perception.

NAL Call no: RB127.P34
Descriptors: mice, analgesics, selective breeding.

NAL Call no: 410 P56
Descriptors: induced analgesia, wild mice, laboratory mice.

Messier, Claude; Emond, Sylvie; Ether, Katia, (1999), New techniques in stereotaxic surgery and anesthesia in the mouse. Pharmacology Biochemistry and Behavior. v. 63 (2), p. 313-318. ISSN: 0091-3057.
NAL Call no: QP901.P4
Descriptors: new techniques, surgery, anesthesia, mouse.

NAL Call no: Film S-1779
Descriptors: mice, stress, morphine, analgesia, diurnal variations.

NAL Call no: SF600.A92
Descriptors: stress, analgesia, mice, opioid.

NAL Call no: RM1.C63
Descriptors: pupil diameter, pain, drugs, mice.

NAL Call no: QP901.P4
Descriptors: D-aspartic acid, mice, antinociceptive effect.

NAL Call no: QP901.E8
Descriptors: morphine analgesia, beta-carotene, mice.

Pinto, Luisa; Borrelli, Francesca; Bombardelli, Ezio; Cristoni, Aldo; Capasso, Francesco, (1998), Anti-inflammatory, analgesic and antipyretic effects of glaucine in rats and mice. Pharmacy and Pharmacology Communications. v. 4 (10), p. 502-505. ISSN: 1460-8081.
Descriptors: glaucine, rats, mice, effects.

Language: Japanese.
Descriptors: analgesics, mice, circadian rythm.

NAL Call no: RM1.C63
Descriptors: procaine, lidocaine, dimethocaine, nociception, mice.

NAL Call no: 442.8 L62
Descriptors: morphine tolerant mice, antinociceptive synergism.

NAL Call no: 396.8 J825
Descriptors: transdermal delivery, analgesics, mouse skin, cadaver.

NAL Call no: QP1.P4
Descriptors: analgesia, cold, oxygen/helium, mice.

Language: Japanese.
Descriptors: morphine, mu receptors, mice.

Descriptors: modulation, morphine, mice, analgesia.

NAL Call no: QP351.N3
Descriptors: venlafaxine, mice, opioid, adrenergic, mechanisms.

NAL Call no: QP901.P4
Descriptors: morphine, mice, behavior.

NAL Call no: QP901.P4
Descriptors: intracellular calcium, morphine tolerance, mice.

NAL Call no: 450.P697
Descriptors: analgesics, smilax, medicinal plants, mice.

NAL Call no: RM1.C63
Descriptors: hydrocortisone, effects, aspirin, mice.

NAL Call no: 442.8 L62
Descriptors: tianeptine, analgesic effect, mice.
NAL Call no: QP351.N3
Descriptors: morphine, analgesia resistant, mice.

NAL Call no: RS164.P59
Descriptors: mice, nociception, herbal medicines.

Walter, T.L.; Chau, T.T., (1995), Antinociceptive activities of non-steroidal antiinflammatory drugs (NSAIDS) following intracerebroventricular (i.c.v.) And intrathecal (i.t.) Administration in mice. Inflammation Research. v. 44 (Suppl.2) p. 133-134. ISSN: 1023-3830.
NAL Call no: RS122.A3
Descriptors: antinociceptive activities, NSAIDS, mice.

NAL Call no: QL55.A1L3
Descriptors: ischemia, anesthesia, analgesics, mice.

NAL Call no: QH301.B46
Descriptors: antinociception, verapamil, chloramphenicol, mice.

Marine Mammals

NAL Call no: 41.8 V641
Descriptors: drug-induced euthanasia, cetaceans, administration, dosage.

NAL Call no: SK575.S6S6
Descriptors: chemical restraint, fur seals elephant seals.

Descriptors: pinniped, anesthesia.

NAL Call no: QL713.2.M372
Descriptors: anaesthesia, narcotics, drugs, Pinnipedia, literature reviews.
NAL Call no: QL713.2.M372
Descriptors: immobilization, walrus, etorphine, zoletil.

NAL Call no: 41.9 W64B
Descriptors: isoflurane, sea lion pups, anesthesia.

NAL Call no: 41.9 W64B
Descriptors: meperidine hydrochloride, restraint, cetaceans, pinnipeds.

NAL Call no: 41.9 W64B
Descriptors: analgesics, adverse effects, wild animals, northern sea lion.

NAL Call no: 41.8 AU72
Descriptors: pinniped, immobilization, seals, anesthetic agents.

NAL Call no: 41.8 V641
Descriptors: immobilization, elephant seal, leopard seal, cyclohexamine, xylazine.

NAL Call no: 41.9 W64B
Descriptors: mandibular anesthesia, bottlenose dolphin.

NAL Call no: 49.1 W64B
Descriptors: immobilization, fur seals, ketamine, diazepam.


NAL Call no: SF997.5.M35C7

NAL Call no: 41.9 W64B
Descriptors: sea otter, fentanyl, azaperone, analgesia, immobilization.

NAL Call no: SF601.A47
Descriptors: camel, drugs, toxicity, adverse reactions.

NAL Call no: SF601.J6
Descriptors: chemical restraint, exotic species.


NAL Call no: 41.8 R3224
Descriptors: bison genus, anesthesia, efficacy, drug combinations, effects, adverse effects.

NAL Call no: 41.9 W64B
Descriptors: desert mule deer; immobilization, tolazine, xylazine, ketamine.

NAL Call no: 41.9 W64B
Descriptors: white-tailed deer, xylazine, ketamine, glycosuria.


NAL Call no: 41.8 AM3
Descriptors: llamas, epidural analgesia, lidocaine, xylazine.

NAL Call no: 41.9 W64B
Descriptors: collard peccaries, feral hogs, immobilization.

NAL Call no: SF601.V523
Descriptors: exotic animals, analgesia, anesthesia.

NAL Call no: SF605.V47
Descriptors: analgesia, techniques, principles, zoo medicine.

NAL Call no: SF910.P34A55 1992

NAL Call no: SF601.J6
Descriptors: addax, epidural analgesia, sedation, pregnant females.

NAL Call no: QP901.C6
Descriptors: naked mole-rat, morphine, aggression.

NAL Call no: SF601.J6
Descriptors: white rhino, chemical immobilization, drug combinations.

NAL Call no: 410 J827
Descriptors: black-footed ferrets, analgesia, ketamine-medetomidine, isoflurane.

NAL Call no: 41.9 W64B
Descriptors: chemical immobilization, red foxes, ketamine, xylazine, promazine.

NAL Call no: 41.9 W64B

Descriptors: immobilization, grey wolves, responses, tiletamine, zolazepam.

NAL Call no: 41.9 W64B
Descriptors: immobilization, grey wolves, sufentanil citrate.

NAL Call no: 41.9 W64B
Descriptors: grey wolves, response, butorphanol, xylazine, naloxone, yohimbine.

NAL Call no: 41.9 W64B
Descriptors: grey wolves, xylazine, yohimbine.

Descriptors: treatment techniques, use of analgesics, orthopaedic disorder management.

NAL Call no: 41.8 IN2
Descriptors: camel, ketoprofen, pharmacokinetics.

NAL Call no: SF601.J6
Descriptors: cheetah, epidural morphine, hip replacement.

NAL Call no: SF601.J6
Descriptors: elephant, etorphine, carfentanil, comparative effects.

NAL Call no: SF601.C64
Descriptors: anesthesia, small nondomestic mammals.

NAL Call no: 41.8 IN2
Descriptors: analgesics, camel, pentazocine, chlorpromazine.

NAL Call no: 41.9 W64B
Descriptors: captive wild canines, anaesthesia, ketamine, xylazine.

NAL Call no: SF910.P34A55 1992
Descriptors: alpha 2-antagonist, domestic animals, wild animals.

NAL Call no: SF604.I45
Descriptors: buffalo, analgesic drug, xylazine, detomidine.

NAL Call no: SF604.J342
Descriptors: african lion, chemical restraint, medetomidine, ketamine.

NAL Call no: 41.9 W64B
Descriptors: two-toed sloth, anesthetic, injectable.

Primates

NAL Call no: 391.8 F73
Descriptors: toxicity, lornoxicam, cynomolgus monkey.

NAL Call no: 410.9 P94
Descriptors: ketamine, ketamine-xylazine combination, anesthesia, rhesus monkey.

NAL Call no: 396.8 J82
Descriptors: opiates, analgesia, shock, Macaca mulatta.

NAL Call no: 396.8 J82
Descriptors: butorphanol, analgesia, rhesus, opioid, agonists, drug effects.

NAL Call no: 396.8 J82
Descriptors: analgesics, opioids, squirrel monkey, drug effects.

NAL Call no: 396.8 J82
Descriptors: morphine, chronic effects, analgesia, squirrel monkey.

Descriptors: lidocaine, neural blockade, rhesus monkey, pharmacokinetics.

Descriptors: lidocaine, rhesus, neural blockade, pharmacokinetics.

Descriptors: lidocaine, spinal anesthesia, rhesus.

NAL Call no: 396.8 J82
Descriptors: morphine, analgesia, squirrel monkey, dose response, adverse effects.

NAL Call no: 396.8 J82
Descriptors: squirrel monkey, analgesic, antagonism effects, opioids.

Descriptors: opioid peptides, agonists, analgesia, activity, squirrel monkey.

NAL Call no: 396.8 J82
Descriptors: analgesics, binding sites, drug effects, opioids, rhesus.

NAL Call no: QD415.A1X4
Descriptors: meptazinol, rats, patas monkey, pharmacokinetics, metabolism.

NAL Call no: QP901.P4
Descriptors: pain perception, cocaine, antinociceptive effects, rhesus monkey.

Descriptors: new born, rhesus, meperidine, drug effects, oxygen deprivation.

Descriptors: narcotic analgesics, monkeys, disposition.

NAL Call no: RB127.W67
Descriptors: prolonged analgesia, monkey, brain stimulation.

NAL Call no: RC321.E96
Descriptors: naloxone reversal, acupuncture, analgesia, monkey.

NAL Call no: QP901.E8
Descriptors: opioids, analgesia, rhesus monkey.

Descriptors: electroanesthesia, studies, rhesus monkey.

NAL Call no: 396.8 J82
Descriptors: rhesus monkey, opioid receptors, capsaicin, nociception.

Descriptors: opioid, receptors, rhesus monkey, brain.


NAL Call no: RS1.A7
Descriptors: analgesia, monkey, dog, oral, rectal, dosage.


NAL Call no: Film S-1779
Descriptors: analgesia, squirrel monkey, administration, dosage.


NAL Call no: 396.8 J82
Descriptors: morphine, tolerance, rhesus monkey, ventilation.

Descriptors: morphine, primates, cholinergic system, nociception.

Descriptors: morphine, scopolamine, primate, cross tolerance, sites of action.


Descriptors: enflurane, halothane, rhesus monkey, cardiovascular effects.


NAL Call no: RM1.A73
Descriptors: electro-acupuncture, analgesia, monkeys, assessment.

Descriptors: Macaca cyclopis, aspirin, induced analgesia.


NAL Call no: RC321.E96
Descriptors: dental pain, aspirin analgesia, monkey, dosage, therapy.

A Reference Source for Analgesia & Analgesics in Animals, AWIC Series 2000-02

NAL call no: RM300.A1D7
Descriptors: dizocine, rhesus monkey, pharmacokinetics.

Descriptors: ketamine, anesthesia, rhesus, mechanisms.

Descriptors: ketamine, anesthesia, rhesus, neural mechanisms.

Descriptors: ketamine, macaca, dose, anesthesia, analgesia.

NAL call no: RG1.A5
Descriptors: baboon, analgesia, postoperative, myometrial contractility.

Descriptors: rhesus monkey, diazepam, pharmacokinetics.

NAL call no: 41.8 AM3A
Descriptors: fentanyl, effects, isoflurane anesthesia, rhesus monkey.

NAL call no: 396.8 J82
Descriptors: analgesia, respiratory, effects, cannabinoid, opioid, agonists, rhesus monkey.

NAL call no: RC321.E96
Descriptors: Macaca cyclopis, analgesic action, clonidine, mode.

NAL call no: RB127.P34

Rabbits & Rodents

Descriptors: rabbits, anesthesia, analgesics, injectable, inhaled, pharmacodynamics.

Descriptors: rabbits, injectable anesthetics, renal failure, toxicity, intramuscular injections.

Descriptors: rabbits, analgesia, restraint, immobilization.

Descriptors: rabbit, midazolam, neurotoxicity.

Descriptors: rabbits, antibiotics, dosage, analgesics, anesthetics, toxicity.

Descriptors: rabbits, anesthesia, fentanyl, neuroleptics, drug antagonism.

Descriptors: laboratory animals, pain, post-operative care, analgesics.

NAL Call no: QL55.A1L3
Descriptors: rabbits, anaesthesia, halothane, equipment, effects.

NAL Call no: QL55.A1L3
Descriptors: rabbits, rodents, anesthetics, fentanyl, drug combinations.

Descriptors: rabbits, hyoscyamine, conjunctival reflex test.

NAL Call no: Sf914.A53 1990
Descriptors: rabbits, anesthetics, analgesics.

NAL Call no: 41.8 AM3A
Descriptors: dogs, sheep, rabbits, analgesics, species differences.

Descriptors: rabbits, lower esophageal sphincter, relaxation.

NAL Call no: QL55.A1L3
Descriptors: rats, mice, rabbits, pain, analgesics, anti-inflammatory agents.

NAL Call no: 410.9 P94
Descriptors: New Zealand white rabbits, anesthesia, ketamine, fentanyl, propofol.

NAL Call no: 410.9 P94
Descriptors: anesthesia, fentanyl, intravenous, rabbits, analgesia, assessment.

NAL Call no: QL55.A1L3
Descriptors: new zealand white rabbits, anesthesia, ketamine, propofol, potency.

NAL Call no: 41.8 AM3A
Descriptors: rabbits, analgesics, pharmacokinetics, half-life, injection.

NAL Call no: QL55.A1L3
Descriptors: rabbits, anesthesia, analgesics, dosage effect.

NAL Call no: SF407.R6R63 1994

NAL Call no: SF914.A53 1990
Descriptors: rodents, anesthesia, analgesics.

Descriptors: rabbit, midazolam, smooth muscle, mesenteric artery.

Rats

NAL Call no: 41.8 V641
Descriptors: rats, pain, analgesics, drug effects.

NAL Call no: RS164.P59
Descriptors: medicinal plants, edema, analgesics, rats, pain, rubiaceae.

NAL Call no: RB127.P34
Descriptors: morphine, local, infant rats, effect.

NAL Call no: QL55.A1L3
Descriptors: injectable anesthetics, rats.

Descriptors: intrathecal ketamine, rat, decrease, neuropathic pain behavior.
NAL Call no: RB127.P34
Descriptors: rats, analgesics assays, animal behavior.

NAL Call no: Film S-1779
Descriptors: analgesia, rats, opiate, NMDA process.

NAL Call no: 410.9 P94
Descriptors: analgesics, rats, pica, buprenorphine.

NAL Call no: SF405.5 A23
Descriptors: rats, acetaminophen, analgesics, drinking water.

NAL Call no: RB127.P34
Descriptors: rats, analgesics, diabetes, pain drug effects.

NAL Call no: 396.8 B77
Descriptors: pain perception, analgesia, brain, rats, bradykinin receptors.

NAL Call no: Film S-1779
Descriptors: rat, sex differences, cocaine, nicotine, analgesics.

NAL Call no: QL55.A1L3
Descriptors: rats, anesthetics.

NAL Call no: QL55A1L33
Descriptors: rats, buprenorphine jello, oral, postoperative analgesia.


NAL Call no: 41.8 V641
Descriptors: rats, analgesics, pain, ketoprofen, oral administration.

NAL Call no: QL55.A1L3
Descriptors: rats, surgery, anesthesia, halothane, locomotion, food and water intake.

NAL Call no: QP901.P4
Descriptors: analgesia, pain perception, drug tolerance, hypoalgesia, rats.

Language: German with a summary in English.
NAL Call no: DISS F1994069
Descriptors: rat brain, neurotransmitters, dopamine, noradrenaline, effects.

Language: French.
Descriptors: analgesia, nitric oxide, adrenergic receptors.

Descriptors: rats, alcohol, analgesia.

NAL Call no: Film S-1779
Descriptors: pain, analgesia, sensory systems, rat.

NAL Call no: 389.8 J82
Descriptors: undernutrition, stress, pain, rats, young animals, protein deficiencies.

NAL Call no: QL55A1L3
Descriptors: rats, local anesthetics, analgesics, postoperative care, pain.

NAL Call no: QL55A1L3
Descriptors: rats, ketamine/medetomidine, repeated anaesthesia.

Heyliger, Simone O.; Goodman, Carl B.; Ngong, Josephine M.; Soliman, Karam F.A., (1998), The analgesic effects of
Descriptors: analgesia, tyrptophan, metabolites, rat.

NAL Call no: QL55.A1L3
Descriptors: rats, anesthesia, fentanyl, agonists, antagonists, drug combinations.

NAL Call no: 442.8 L62
Descriptors: rat, analgesics, audible, ultrasonic, pain.

NAL Call no: QP901.P4
Descriptors: physical activity, sensitivity, morphine tolerance, rats.

NAL Call no: 410.9 P94
Descriptors: rats, flunixin, analgesics, overdose, drug toxicity, adverse effects.

NAL Call no: QP901.C6
Descriptors: method, analgesic effect, detecting, pain, rat.

Descriptors: rats, analgesic, agmatine, morphine, enhancement.

NAL Call no: 442.8 L62
Descriptors: morphine, tolerance, rats, arthritic.

NAL Call no: QL55 A1L3
Descriptors: rats, morphine, naltrexone, oral administration, analgesics, pain.

NAL Call no: SF915.J63
Descriptors: rats, flunixin, analgesics, pain, laparotomy, drug combinations.
NAL Call no: 41.8 V643 
Descriptors: pain, surgery, rats, analgesics.

NAL Call no: QL55.A1L3 
Descriptors: rats, analgesics, postoperative care.

NAL Call no: QL55.A1L3 
Descriptors: rats, anesthesia, halothane, analgesics, food and water consumption.

NAL Call no: QL55.F43 1993 
Descriptors: rats, pain, analgesia, animal welfare, experimental surgery.

NAL Call no: RM300.J6 
Descriptors: analgesic drugs, effects, rat, pain.

NAL Call no: 396.8 J82 
Descriptors: pain, inflammation, rats, kappa-opioid, agonist, effects.

NAL Call no: RS164.P59 
Descriptors: rats, traditional medicine, Brazil.

NAL Call no: RB127.P34 
Descriptor: epidural opioid, infant rats, analgesia, response.

NAL Call no: RB127.P34 
Descriptors: infant rats, opioid, analgesia, carrageenan, capsaicin.
NAL Call no: QP351.N3
Descriptors: rat, metamizol, single motor units, effect.

NAL Call no: RC900.5.U7
Descriptors: rats, kidney disease, toxicity, analgesics.

Descriptors: rats, mice, anti-inflammatory, analgesic, antipyretic, effects, glaucine.

NAL Call no: QP901.E8
Descriptors: spinal analgesia, endomorphins, rat, neuropathic pain.

Descriptors: fentanyl, MK-801, effect, rats.

Descriptors: morphine, desipramine, serotonin, combinations, rat.

NAL Call no: 442.8 L62
Descriptors: rats, analgesia, inhibitor, diprotin A, naloxone.

NAL Call no: QL55 A1L3
Descriptors: rats, anaesthetics, analgesics, ketamine, buprenorphine, pentobarbitone.

Descriptors: morphine, rats, epidural infusion, tolerance.

Sandra, Maurizio; Ottani, Alessandra; Vitale, Giovanni; Ping, Luigi Alberto, (1998), Acetylsalicylic acid potentiates...
NAL Call no: QP901.E8
Descriptors: rat, brain, nervous system, morphine, glucose.

Descriptors: alcohol, tolerance, glucose, rats, morphine, drug tolerance, analgesia.

NAL: Call no: RB127.P34
Descriptors: rats, anesthesia, analgesics, stress, pain.

Descriptors: visceral analgesic tolerance, rats, butorphanol.

NAL Call no: SF601.I45
Descriptors: analgesia, non-steroidal, anti-inflammatory, combinations, rats.

NAL Call no: QP1.P4
Descriptors: rats, suckling, undernutrition, analgesics.

NAL Call no: QL737.R666 W38
Descriptors: surgical techniques, experimental techniques, rat.

NAL Call no: QL55.A1L3
Descriptors: anaesthesia technique, rats, mice, etorphine-methotrimeparzine, midazolam.

NAL Call no: QL785.A725
Descriptors: pain, rats.

NAL Call no: RB127.P34
Descriptors: rats, oxytocin, pain, drug effects, heat.

Sheep

Descriptors: sheep, propofol, fentanyl, septic.

NAL Call no: 41.8 AM3A
Descriptors: sheep, anesthesia, acupuncture, pain, prolactin, endorphins.

Descriptors: analgesia, postoperative, sheep, intrathecal neostigmine.

NAL Call no: 41.8 V641
Descriptors: sheep, xylazine, ketamine, analgesia, duration.

NAL Call no: SF915.J63
Descriptors: sheep, xylazine, detomidine, medetomidine, analgesics, effects.

Descriptors: sheep, amitriptyline, intrathecal, assessment.

NAL Call no: SF915.J63
Descriptors: sheep, non-steroidal-antiinflammatory agents, flunixin, analgesics, pain.

Clapp, James F. Iii; Kett, Attila; Olariu, Aniculina; Omoniyi, Abimbola T.; Wu, Dunli; Kin, Hyungjin; Szeto, Haze H.,
A Reference Source for Analgesia & Analgesics in Animals, AWIC Series 2000-02


NAL Call no: RG1.A5
Descriptors: sheep, opioid agonists, cardiovascular, metabolic, responses.


NAL Call no: QL55.A1L3
Descriptors: lambs, halothane, nitrous oxide, analgesics, injectable anesthetics.


Descriptors: sheep, bupivacaine, nerve block, controlled release.


NAL Call no: SF910.P34A55 1992
Descriptors: sheep, analgesics, agonists, spinal cord, drug effects, anesthesia.


NAL Call no: SF601.B6
Descriptors: ewes, xylazine, lidocaine, vaginal prolapse.


NAL Call no: SF601.V484
Descriptors: lambs, tail docking, analgesic treatments.


NAL Call no: 41.8 Au72
Descriptors: sheep, pain, analgesics, methadone, flunixin, xylazine, efficacy.


Descriptors: sheep, bupivacaine, levobupivacaine, cardiovascular, cns.


NAL Call no: RM301.4.B56
Descriptors: sheep, morphine, nasal administration.


NAL Call no: SF915.J63
Descriptors: sheep, xylazine, pain, drug effects, analgesia.
NAL Call no: 41.8 V641
Descriptors: sheep, xylazine, breed differences, drug effects.

NAL Call no: 41.8 Am3A
Descriptors: sheep, anaesthesia, guaifenesin, ketamine, xylazine, intravenous injection.

NAL Call no: SF910.P34A55 1992
Descriptors: sheep, agonists, opioids, analgesics, xylazine, fentanyl, pithidine.

NAL Call no: SF910.P34A55 1992
Descriptors: sheep, pain, analgesics, models.

NAL Call no: SF910.P34A55 1992
Descriptors: sheep, agonists, opioids, drug effects, analgesics, xylazine, dosage.

Descriptors: propofol, brain concentration, rate of administration, sheep.

NAL Call no: SF915.J63
Descriptors: sheep, pain, analgesics clonidine, fentanyl, drug effects.

Descriptors: sheep, bupivacaine, levobupivacaine, systemic, regional.

ISSN: 0145-6296.
NAL Call no: SF601.A47
Descriptors: sheep, yohimbine, antagonists, analgesics, medetomidine.

Mohammed, A.; Liman, M.S., (1998), Xylazine (Chanazine) as an epidural anaesthetic agent in sheep. Small
NAL Call no: 41.8 V641
Descriptors: ewes, medetomidine, pain, drug effects, analgesia.

NAL Call no: 410.9 P94
Descriptors: sheep, analgesics, drug effects, cardiovascular system.

NAL Call no: 424.8 L62
Descriptors: sheep, opioids, distribution.

NAL Call no: 41.8 IN2
Descriptors: sheep, ketorolac, safety.

Descriptors: sheep, neostigmine, bupivacaine, spinal.

NAL Call no: 41.8 V641
Descriptors: sheep, immobilization, electrical treatment, pain.

Descriptors: sheep, ropivacaine, bupivacaine, comparison.

NAL Call no: SF601.V484
Descriptors: ewes, dystocia, xylazine, anesthesia, analgesia.

NAL Call no: SF601.I4
Descriptors: sheep, analgesics, injection, dosage, drug therapy, reproductive disorders.


NAL Call no: QP251.A1T5
Descriptors: ewes, conduction anesthesia, xylazine, lignocaine.

NAL Call no: SF601.V484
Descriptors: sheep, ewes, xylazine, lignocaine, post-partum.

Descriptors: sheep, morphine, concentrations.

Descriptors: sufentanil, sheep, concentrations, dural puncture.

NAL Call no: SF601.I4
Descriptors: anesthesia, sheep, goats, analgesics.

NAL Call no: 41.8 Z5
Descriptors: comparison, lidocaine, xylazine, intravenous anaesthesia, sheep.

NAL Call no: SF911.V43
Descriptors: sheep, morphine, subarachnoid space.

NAL Call no: SF915.J63
Descriptors: sheep, analgesics, dosage, drug effects.

NAL Call no: 41.8 R312
Descriptors: sheep, analgesics, dosage, pain.

Descriptors: sheep, propofol, effects, rate of injection.

Return to: Title Page / Table of Contents
Swine

NAL Call no: SF610.A47
Descriptors: pigs, analgesics, poisoning, liver function.

ISSN: 0023-6772.
NAL Call no: QL55.A1L3
Descriptors: pigs, ketamine, anesthesia, surgery.

NAL Call no: SF915.J63
Descriptors: pigs, appetite, analgesics, anti-inflammatory agents.

NAL Call no: QL55.I5
Descriptors: pigs, sepsis, anesthesia, efficacy, propofol.

NAL Call no: SF602.A5
Descriptors: pigs, stress, analgesics, pain.

NAL Call no: 41.8 Am3A
Descriptors: pigs, xylazine, dosage effects, sedation, analgesia.

NAL Call no: 410.9 P94
Descriptors: pigs, anesthesia, xylazine, dosage effects, ketamine.

NAL Call no: 410.9 P94
Descriptors: pigs, anesthesia.
NAL Call no: 41.8 AM3A
Descriptors: pigs, ketamine, anesthesia, administration.

NAL Call no: SF601.V535
Descriptors: pigs, ruminants, analgesics, drugs, neuroleptics.

NAL Call no: SF601.V535
Descriptors: pigs, ruminants, analgesics, anesthesia, injections.

NAL Call no: QL55.A1L3
Descriptors: pigs, thiopental, fentanyl, anesthesia, analgesia.

NAL Call no: RD29.5 S94S944 1998
Descriptors: surgery, experiments, swine, anesthesia.

NAL Call no: SF914.A53 1990
Descriptors: miniature pigs, anesthesia, analgesia.

NAL Call no: 410.9 P94 Descriptors: pigs, xylazine, detomidine, medetomidine, antagonists, drug effects

NAL Call no: SF911.V43
Descriptors: pigs, lidocaine, xylazine, opioids, inhaled anesthetics, analgesia.

NAL Call no: 41.8 M69
Descriptors: pigs, anesthesia, xylazine, analgesia, drug combinations.
Go to: Title Page / Table of Contents

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May 23, 2002