household, foliar and soil-inhabiting agronomic and non-agronomic pests. A compound disclosed therein, (S)-methyl 7-chloro-2,5-dihydro-2-[[methoxycarbonyl) [4 (trifluoromethoxy) phenyl]amino] carbonyl] indeno [1,2-e] [1,3,4] oxadiazine-4a(3H)-carboxylate; common name: Indoxacarb, or DPX-KN128 has been registered by the EPA as a "reduced-risk" pesticide, Chemical Code 067710, CAS No. 173584-44-6, U.S. EPA PC 067710 (S-isomer). *British Journal of Pharmacology* (2001) 132, 587-595;doi:10.1038/sj.bjp.0703853 entitled "*Indoxacarb, an Oxadinzine Insecticide, Blocks Insect Neuronal Sodium Channels*", discloses a study investigating the mode of action of Indoxacarb as an neuronal sodium channel inhibitor in *Periplaneta Americana*. *Research Disclosure,* May 1997, Number 39786 entitled *"Mixtures of Arthropodicides and Fungicides"* discloses the use of Indoxacarb in combination with other arthropodicides in land or aerially applied pesticide formulations for the protection of plants against arthropodal pests. U.S. Patent No. 6,395,765 B1 relates to compositions for the treatment and protection of parasitic pests on domestic animals that utilize topical application to a localized region of the domestic animal's body.

BRIEF SUMMARY OF THE ~~INVENTION~~DISCLOSURE

In one aspect, the present ~~invention~~disclosure provides a composition and method for control of ectoparasites on a domestic animal, including eradication of ectoparasites on a domestic animal, decreasing the number of ectoparasites on a domestic animal, and/or preventing ectoparasite infestation on a domestic animal. The method includes topically applying to a localized region or regions having a cumulative surface area of less than or equal to 10% of the total surface area of the domestic animal an ectoparasitically effective amount of a topical formulation comprising Indoxacarb and veterinarily acceptable carrier. The present composition can also optionally include an additional pesticide.

In a preferred aspect, the present ~~invention~~disclosure provides a composition and method for control of ectoparasite infestation in a domestic animal comprising applying to a localized region or regions having a surface area of less than or equal to 10% of the total surface area of the domestic animal an ectoparasitically effective

amount of a local topical formulation comprising Indoxacarb in a veterinarily acceptable solvent and optionally further comprising a crystallization inhibitor.

Preferred solvents, crystallization inhibitors, modes of application and dosages in such formulations are disclosed.

In a first aspect, there is provided a local, topical, spot-on formulation for control of ectoparasites on a domestic animal comprising i) an ectoparasitically effective amount of Indoxacarb and one or more additional pesticides, and ii) a veterinarily acceptable carrier; wherein the concentration of Indoxacarb in said formulation is at least 100g/L; and wherein said veterinarily acceptable carrier comprises triacetin and a solvent selected from the group consisting of a glycol ether and an alkyl acetate.

In a second aspect, there is provided the use of the formulation as defined above for the manufacture of a medicament for the spot-on treatment of ectoparasites on a domestic animal.

DETAILED DESCRIPTION OF THE INVENTION

Applicants specifically incorporate the entire content of all cited references in this disclosure. Further, when an amount, concentration, or other value or parameter is given as either a range, preferred range, or a list of upper preferable values and lower preferable values, this is to be understood as specifically disclosing all ranges formed from any pair of any upper range limit or preferred value and any lower range limit or preferred value, regardless of whether ranges are separately disclosed. Where a range of numerical values is recited herein, unless otherwise stated, the range is intended to include the endpoints thereof, and all integers and fractions within the range. It is not intended that the scope of the invention be limited to the specific values recited when defining a range.

Applicant has found that it is possible to effectively control ectoparasite infestation of domestic animals using a specific type of Indoxacarb formulation: a topical formulation applied to a localized region or regions having a surface area of less than or equal to 10% of the total surface area of the domestic animal. The

formulations and methods are especially advantageous for animals in situations where it is difficult or time-consuming to treat all the animals orally or via injection. Thus, the present invention provides topical formulations useful in control of ectoparasites comprising Indoxacarb and a veterinarily acceptable solvent. It has been found by Applicant that certain Indoxacarb local topical formulations are surprisingly effective and persistent.

Definitions

The following definitions relating to Applicant's disclosure are provided.