Smlouva o provedení výzkumu

1. Výzkumný ústav rostlinné výroby v.v.i.

se sídlem

Drnovská 507/73 16106 Praha 6-Ruzyně,

Česká republika

IČO: 00027006 DIČ: CZ00027006

zapsaná v rejstříku veřejných výzkumných institucí

zastoupena RNDr. Mikuláš Madaras, Ph.D.

(dále jen **„VÚRV“)**

1. "BROS" SPÓLKA Z OGRANICZONA

ODPOWIEDZIALNOSCIA SPÓLKA

KOMANDYTOWA

se sídlem

Ul. Karpia 24 61-619 Poznaň,

Polsko

Nr. KRS: 0000594900 REGON: 63454039800000 NIP: 7811739381

zastoupena Maciej Kujawski

(dále jen **„BROS“)**

I.

1. Strany uzavírají tuto smlouvu k úpravě vzájemných práv a povinností při smluvním výzkumu prováděném VÚRV pro BROS.
2. Smluvní výzkum
3. VÚRV pro BROS provede výzkum:

***Studie výběru návnady ke zjištění chutnosti rodenticidního produktu na potkanu obecném (Rattus norvegicus).***

Podrobná specifikace, rozsah a požadavky prováděného výzkumu tvoří přílohu této smlouvy.

(Dále jen **„výzkum“).**

Research agreement

Crop Research Institute.

seated

Drnovská 507/73 16106 Praha 6 - Ruzyně Czech republic

IČO: 0027006

DIČ: CZ00027006

registered public research institution

represented by RNDr. Mikuláš Madaras, Ph.D. (hereinaíiter **„CRI“)**

"BROS" SPÓLKA Z OGRANICZON^ ODPOWIEDZIALNOŠCI4 SPÓLKA

KOMANDYTOWA

se sídlem

Ul. Karpia 24 61-619 Poznaň,

Polsko

Nr. KRS: 0000594900

REGON: 63454039800000

NIP:7811739381

represented by Maciej Kujawski

(hereinafter **“BROS”)**

I.

The purpose of this Agreement is to define the terms and conditions on which CRI will carry out research for BROS.

II. Research

CRI shall perform following research activities for BROS:

***Bait choice feeding study to determine the palatability of the rodenticide product on brown rat (Rattus norvegicus).***

Specification, extent and requirements of research is part of this Agreement as its attachment. (Hereinafter “research”)

1. Termín plnění a dodání výsledků
2. Počátek výzkumu:

říjen 2021

1. Dokončení výzkumu a předání výsledků:

31.12.2021

1. Termíny se prodlužují v případech prodlení BROS s poskytnutím nezbytné součinnosti nebo zaplacením sjednaných záloh o dobu takového prodlení.
2. Výsledky budou dodány ve formě dohodnuté ve specifikaci výzkumu (příloha této smlouvy). Výsledky a reporty jsou dodávány v českém jazyce, není-li výslovně dohodnuto jinak.
3. Cena a platební podmínky
4. Za výzkum provedený VÚRV pro BROS se BROS zavazuje zaplatit VÚRV odměnu ve výši:

5 000 EUR

1. Odměna je splatná:

60% před započetím výzkumu 40% po předání výsledků

1. BROS se zavazuje zaplatit odměnu plus případnou daň z přidané hodnoty (pokud připadá v úvahu) do 14 dnů od doručení faktury.
2. Závěrečná ustanovení.
3. Nedílnou součástí této smlouvy jsou přílohy:

1) Specifikace výzkumu

1. V případě rozporů mezi touto smlouvou a jejími přílohami, má přednost tato smlouva.
2. Pokud se jakékoliv ustanovení této smlouvy stane neplatným, nezákonným nebo nevykonatelným, nemá to vliv na ostatní ustanovení této dohody. V takovém případě dotčená strana může požadovat, aby původní ustanovení bylo nahrazeno platným a vykonatelným ustanovením,

ffl. Period of research and result submission

Research start:

October 2021

Research conclusion and results submission:

31.12.2021

In čase of delay on BROS part with providing necessary assistance or agreed payment - research terms are subject to change accordingly.

Results will be submitted in form agreed in research specification (attachment). Results and report are submitted in czech wording unless specifically agreed otherwise.

IV. Financial provisions

For research performed by CRI to BROS, BROS will pay to CRI a compensation of:

5 000 EUR

Compensation shall be paid:

60% advance payment before research start 40% after results submission

BROS shall pay the amounts plus the applicable Value Added Tax (VAT) (if applicable) within 14 days upon receipt of invoice.

V. Finál provisions

Integrál parts of this Agreement as its attachments are:

1) Research specification

In čase the terms of this Agreement conflict with the terms in its attachments this Agreement shall prevail.

Should any provision of this Agreement become invalid, illegal or unenforceable, it shall not affect the validity of the remaining provisions of this Agreement. In such a čase, the Parties concemed shall be entitled to request a valid and practicable provision be negotiated which fulfils the purpose

které splní účel původního ustanovení.

1. Tato smlouva je úplným ujednáním o předmětu smlouvy a o všech náležitostech, které strany mínily smluvně upravit. Žádný projev stran při sjednávání této smlouvy a neobsazený v této nebo jiné písemné smlouvě nemá zakládat závazek kterékoliv ze stran.
2. Práva a závazky stran z této smlouvy nemohou být postoupena nebo převedena na třetí stranu bez předchozího písemného souhlasu všech ostatních stran.
3. Dodatky a změny textu této smlouvy vyžadují písemnou dohodu mezi všemi stranami.
4. Jakákoliv oznámení dle této smlouvy vyžadují písemnou formu a zaslání na adresu v záhlaví této dohody.
5. Tato smlouva se řídí právem České republiky.
6. Tato smlouva je vyhotovena v českém a anglickém jazyce. V případě jejich rozporů, má přednost znění v českém jazyce.
7. Jakékoliv spory nebo nároky vyplývající nebo související s touto smlouvou a jejími dodatky, včetně jejího vzniku, platnosti, závaznosti, výkladu, provádění, porušení nebo ukončení, stejně jako veškeré mimosmluvní nároky, mají být přednostně řešeny jednáním mezi stranami. Pokud takový spor nebo nárok nebude urovnán v důsledku jednání do 30 dnů od počátku jednání, mají být spory rozhodovány soudy České republiky.

RNDr. Mikuláš Madaras, ředitel

of the originál provision.

This Agreement contains the entire agreement between the Parties hereto regarding the subject matter hereof. No other understandings or conditions unless contained in this or other written agreement, shall be in force and effect.

No rights or obligations of the parties arising from this Agreement may be assigned or transferred, in whole or in part, to any third party without the other parties’ prior written approval.

Amendments and modifications to this Agreement require a separate written agreement signed by all parties.

Any notice to be given under this Agreement shall be in writing to the addresses and recipients as listed in the overhead of this Agreement.

This Agreement is subject to provisions of Czech law.

This Agreement is drawn up in Czech and English language. In čase of any discrepancies, the Czech wording shall prevail.

Any dispute, controversy or claim arising under, out of or in relation to this agreement and any subsequent amendments of this agreement, including, without limitation, its formation, validity, binding effect, interpretation, performance, breach or termination, as well as non-contractual claims, shall be primarily solved by negotiation between Parties. If, and to the extent that, any such dispute, controversy or claim has not been settled pursuant to the negotiation within 30 days of commencement of the negotiation, the courts of Czech republic shall háve exclusive jurisdiction.

Signatures:

Poznaň,

"BROS" SPÓLKA Z OGRANICZON^ ODPOWIEDZIALNOSCIA SPÓLKA

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61-619 Poznaň, ul. Karpia 2C 4? Z/n IbfcW 826 2512-NIP 7811739381

KOMAND YTOWA

Poznaň, 20.09.21

Research Institute of Crop Production Drnovská 507,

161 06 Praha 6 - Ruzyně Czech Republic

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|  | **Order for test** |
| Order nr | 06/09/2021 |
| Dáte of order | 20.09.2021 |
| Product/sample name | Plyn na myszy i szczury (MIG 50 LQ) |
| Contact person | Maciej KujawskiBROS Sp. z ograniczonq odpowiedzialnoéciq sp.k. ul. Karpia 2461-619 PoznaňTel.572 353 660e-mail: maciej.kujawski@bros.pl |
| Test type | Laboratory Bait choice feeding test for authorisation purpose according to Regulation (EU) 528/2012 |
| Testing purpose | The aim of the bait choice feeding study is to determine the palatability of the rodenticide product on brown rat *(Rattus norvegicus).* |
| Test result should correspond to adequate question | Is the product palatable for *Rattus norvegicus?* Will rats consume the bait product when they are given a free choice between bait and their standard food and water? |
| Does GLP standard is required? | No |
| Remarks | **The food should be as dry as possible so that the rodent would need to replenish liquids by drinking.** |
| Samples | 1 x 6 L BROS Mice and Rats Liquid Bait (MIG 50 LQ) |
| Test method | Appendix 1The test should be performed according to:* REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products
* Guidance on the Biocidal Products Regulation - Volume II Efficacy - Assessment and Evaluation (Parts B+C), Version 3.0, April 2018

**Liquid bait formulations**The test must be carried out as above with the following exceptions:* a suitable compounded laboratory diet shall be freely available;
* tap water must be ušed as the control bait;
* all procedures relating to the solid control and test baits must be applied instead and as appropňate to the liquid control and test baits;
* when the positions of the test and control baits are interchanged
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|  | the positions of the drinking tubes, if ušed, should not be interchanged;* liquid baits must be provided in containers with non-drip nozzles or suitable open pots;
* a filled Container must be placed out of reach of the animals in order to monitor weight loss due to evaporation.

The sponsor reserves the right to verify the report. The finál version needs to be agreed upon. |
| Label | Appendix II |
| N° of replicates: | 10 wild or laboratory animals - 5 males and 5 females of Rattus norvegicus |
| Expected results | ž 90% mortalityThe percentage of ingested bait containing the product should be normally £ 20%, but it may be lower because a mortality of ž 90% the product would still be effective. In čase of a bait ingestion < 20%, justification should be provided |
| Report form | PDF report in Czech or English version send to:maciei.kuiawski@bros.Dl2 hard copies in Czech or English send to:Maciej KujawskiBROS Sp. z ograniczonq odpowiedzialnošciq sp. k. ul. Karpia 2461-619 Poznaň |
| Net price | 5000 EURCosts of English report are not included |
| Expected time of test start | September/October 2021 |
| Ultimate time of tests conclusion | Noveber/December 2021 |



**<SROS**

Signatuře





**Appendix I**

**Laboratory test - Bait choice feeding test**



|  |  |
| --- | --- |
| **Testing purpose** | Laboratory Bait choice feeding test for authorisation purpose according to Regulation (EU) 528/2012 *(Rattus norvegicus)* |
| **Test type:** | Bait choice feeding laboratory test |
| **Product mode of action:** | Bait |
| **Label claims:** | See Appendix II* ušed for rodent control - the target organisms to be controlled are brown rats (Rattus rattus), black rats (Rattus norvegicus), house mice (Mus musculus), inside, outside and around buildings.
* ušed in and around buildings - in the immediate vicinity of rodents: walking paths, burrows, entrances to underground corridors, nesting places, holes, places where farm animals are fed, and in open areas (parks, tennis courts, campsites, etc.). 100 ml of the product should be applied only in speciál water feeder inserted into sealed, safe and resistant to manipulation bait stations intended for liquid formulations, protected against flooding, unwanted opening and, where possible, attached to the ground or other structures. Bait stations should be placed every 3-4 m when fighting mice and every 15 m when fighting rats. When using the product inside and around buildings, bait stations should be placed along the walls of buildinqs and in places of rodent activity.
 |
| **Materials:****test insects (species, sex, age, source, number):** | 10 roof rats (Rattus norvegicus) - 5 males and 5 females (adults)Although laboratory testing should preferably be performed on second generation wild animals housed in groups, the difficulty and constraints associated with obtaining and maintaining them for testing purposes is recognized. Therefore for tests conducted within the laboratory, animals sourced from recognized commercially available strains are acceptable. |
| **Oosage:** | 100 ml of the product per bait station; bait stations should be placed every 3-4 m when fighting mice and every 15 m when fighting rats. When using the product inside and around buildings, bait stations should be placed along the walls of buildings and in places of rodent activity.**Dosage for the bait choice feeding test should be verífied by the laboratory - the average daily liquid requirement of the rodent.** |
| **N° of replicates:** | 10 wild or laboratory strain roof rats (5 males and 5 females) |
| **Test intervals (observation period):** | 24 h after liquid bait and water application and then every day during the choice period till 4,h day, when animals are returned to the standard laboratory diet.\*once the sample doesn't reach minimum efficacy limit the test should be stopped and sponsor should be informed promptly. Sponsor then can decide about the end of the test. |
| **Test times during** | During the observation period the rodents are observed at least once per day |

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| **observation period:** | and any signs of toxicity are recorded. Humane end-points should be applied in line with Directive 2010/ 63/ EU to all ammals showing clinical signs that can determine impending death. |
| **Efficacy limits:** | ž 90% mortalityThe percentage of ingested bait containing the product should be normally 2 20%, but it may be lower because a mortality of *z* 90% the product would still be effective. In oase of a bait ingestion < 20%, justification should be provided |
| **Test descripríon:** | Test is preferably doně with wild strain animals. When laboratory strains that resemble wild strains are ušed, a short description of the behavioural characteristics as well as reasoning for the choice of the respective strain as test animals should be provided. Generally, the diet which rodents (laboratory and wild strain) receive prior to the tests can be crucial for their behavior towards bait products. It is therefore important, as far as possible, the study report must include information on the dietary history of the test animals.In this test design, animals háve the choice between a non-toxic liquid source (water) and the liquid bait containing the active substance. **Either the amount of liquid bait consumed, in which the active substance is incorporated, or the mortality of the rodents is an indication that the bait is sufficientiy palatable for a lethal dose to be ingested.** Results has to be compared with the specified efficacy criterion (see point **Efficacy limits).**The test consist of acclimatisation period, followed by a pre-test diet také assessment, then a test period of normally **5 days** and at least 14 days of post- treatment observation.For the test, normally 10 wild or laboratory strain rodents (5 males and 5 females) are required. Laboratory rodents should be healthy, non-pregnant adults of known strain **(STATE).** Preferably wild adult rodents are ušed. They should be healthy and obtained from free-living populations **(STATE WHERE)** in accordance with Directive 2010/63/EU, Articles 7 and 9 and Section A, 3.2 of Annex III.**Acclimatisation period**On arrival at the laboratory, the wild strains should be treated with an appropriate insecticide to kill ectoparasites and then be housed in smáli groups (no more than five per cage) of the same sex and treatment group if no aggressive behaviour is expected, preferably in solid floor cages with appropriate environmental enrichment. Animals may be housed individually only if scientifically justified.With wild rats especially, it is advisable to plače all items (i.e. food pots) required for the test in the cage before each animal is released into it. **Wild rodents should be acclimatised to laboratory conditions for at least 3 weeks to ensure that no females are pregnant when the test begins.** During this time they should be offered a laboratory animal diet and water should be freely available. To encourage variation in response, animals with body weights throughout the range normally expected for the species should be ušed as far as possible.**Pre-test period**Before the test period begins, it is necessary to ensure that the animals are |

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|  | feeding normally. Following acclimatisation. two water containers/pots are placed either side at the front of the cage and also food pot filled with cereals, such as wheat, broken wheat or a wheat-based mixture or ground laboratory diet or EPA meal. All other food is removed. The quantity of food placed in pot (STATE) and water should be sufficient to meet each animal’s daily needs (exact quantity/weight must be provided). Liquid must be provided in containers with non-drip nozzles or suitable open pots.Water and food uptake should be determined. Therefore all unused food (i.e. food left in the pot) and scattered food must be collected and taken into account by weighing to determine how much of the food has not been eaten. The amount (by weight or volume) of unused water must be provided (corrected for loss due to evaporation). For this purpose, an additional Container containing exactly the same amount of water as in the test cage should be placed outside the cage and out of reach of the animals in order to monitor weight loss due to evaporation.All unused diet (i.e. food left in the pot and scattered food) and water should be discarded and the pots/containers refilled with a fresh supply, to ensure it is palatable. This proceduře should be repeated for a further 3 days and on the last day (of this pre-treatment period) the animals should be weighed.Also on the last day, the diet remaining in pot, scattered food and water is weighed and the total amount of food eaten and water drunk by each rodent calculated (STATE). Any rodent not eating and drinking normally by the last day should be discarded.**Test period**The palatability test commences with 2 clean liquid containers, one filled with a quantity of the test product and the other with a tap water. The right amount of food (for example ground laboratory diet or EPA meal) should also be placed in the cage. Again, the quantity in each pot/container should exceed the normál daily requirement for each animal.After 24 hours, the liquid bait, water and food remaining in each pot/container is weighed and the total amount of food eaten and water drunk by each rodent calculated. When determining the amount of liquid bait taken, it should be corrected each time for the weight loss due to evaporation, based on the weight of the control sample with the same amount of liquid bait placed outside the reach of the animals.All ušed liquid bait, challenge diet and water is discarded and fresh quantities of each are placed in clean pots.In placing the pots back in the cage, the positions of the liquid bait and the water should be interchanged to avoid plače preference. When the positions of the test and control baits are interchanged the positions of the drinking tubes, if ušed, should not be interchanged.This proceduře should be repeated every day during the choice period. **After** day 5 the animals should be returned to the standard laboratory diet.**Observation period**During the observation period the rodents are observed at least once per day and any signs of toxicity and mortality are recorded. Humane end-points should be applied in line with Directive 2010/63/EU to all animals showing clinical signs that can determine impending death.Guidance Document on the recognition, assessment and use of clinical signs as humane endpoints for experimental animals ušed in safety evaluation (OECD, 2002) must be considered.**Results** |





Results háve to be shown as the percentage intake of rodenticide and the percentage intake of water. Also the percentage mortality and any other symptoms should be mentioned.

Full details of the test methods ušed must be provided in report and data háve to be presented to show:

* the daily intake of both water and liquid bait (including loss on evaporation) and also food
* the palatability ratio (amount of liquid bait: amount of water) or
* product acceptance (amount of product drunk expressed as a percentage of total (liquid bait + water) consumption) for different sexes of rodent
* any signs of poisoning and days to death, with appropriate statistical analysis. When no significant differences exist between the sexes, the data from the two sexes may be combined.

In some cases comparison with normál liquid intake is inappropriate. For instance when fast-acting rodenticides cause a reduction in drinking activity or when very smáli quantities of bait are required to cause effect. Therefore, the main criterion is not the percentage of consumed bait but the mortality resulting from poison uptake.

**Appendix II - Label**

**MIG 50 LQ**

Ready-to-use liquid bait for controlling mice *(Mus musculus),* brown rats *(Rattus norvegicus)* and roof rats *(Rattus rattus),* in and around buildings and in open areas (open spaces: home lawns, sports fields, tennis courts, golf courses, drainage ditches, railway embankments, flood embankments, airports).

Contains bait that strongly attracts rodents. Effect delayed for several days prevents rodents from associating the poison with death of other individuals.

Instructions for use:

Product ušed in and around buildings - in the immediate vicinity of rodents: walking paths, burrows, entrances to underground corridors, nesting places, holes, places where farm animals are fed, and in open areas (parks, tennis courts, campsites, etc). 100 ml of the product should be applied only in speciál water feeder inserted into sealed, safe and resistant to manipulation bait stations intended for liquid formulations, protected against flooding, unwanted opening and, where possible, attached to the ground or other structures. Bait stations should be placed every 3-4 m when fighting mice and every 15 m when fighting rats. When using the product inside and around buildings, bait stations should be placed along the walls of buildings and in places of rodent activity.

Monitor the bait stations regularly (in the beginning of deratisation process, at least every 2-3 days for mice and at least every 5-7 days for rats, once a week thereafter) in order to: check if product is effective, if the bait stations are intact and to remove rodent bodies. Re-fill bait when necessary, replace any bait in a bait station in which bait has been damaged by water or contaminated by dirt, search for and remove dead rodents using protective gloves or tools, e g. pliers. Appropriate preventivě measures should be taken to increase bait intake and reduce the likelihood of re-infestation (e.g. blockage of holes, removal of potential food sources).

Before using the product, read and follow the recommendations included in the product information materials or point of sále information, and consider using non-chemical control methods (e.g. traps). Other potential food sources for rodents (e.g. spilled grain, etc.) should be removed. Do not interfere with living environment of rodents before product application, as this may affect the behavior of animals and the consumption of bait.

