ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS

THIS AGREEMENT is dated January 27th 2016

PARTIES

- (1) **Igor Kovalchuk** of 16 Sandstone Rd. S., Lethbridge, AB, T1K 7X8, CANADA (the "Assignor"); and
- (2) InPlanta Biotechnology (InPlanta), incorporated and registered in Alberta, Canada whose registered office is at 16 Sandstone Rd. S., Lethbridge, AB, T1K 7X8, CANADA (the "Assignee").

BACKGROUND

- (A) The Assignor is a founder of InPlanta. InPlanta is developing cannabis breeding program and would like to engage Igor Kovalchuk in cannabis breeding research.
- (B) The Assignor also is a Professor at the University of Lethbridge. The Assignor is an applicant for section 67 license for research in hemp and cannabis. The Assignor will perform work on characterizing on genetic level and breeding new cannabis and hemp varieties for Assignee using the collection of hemp and cannabis cultivars brought by InPlanta (the "Engagement").
- (C) The Assignor has agreed to assign to the Assignee any and all intellectual property rights related to breeding and characterizing new varieties from the original InPlanta's collection arising, or to arise, from work performed by the Assignor during the Engagement on the terms set out in this agreement.

AGREED TERMS

1. INTERPRETATION

1.1 The definitions and rules of interpretation in this clause apply in this agreement.

Assigned Rights: any and all Intellectual Property Rights related to breeding new hemp varieties from InPlanta's collection that have arisen or will arise in the name of the Assignor as a result of any work done for the Assignee and/or during the Engagement.

Engagement: has the meaning given to it in the background of this agreement.

Intellectual Property Rights: patents, utility models, rights to inventions, copyright and neighbouring and related rights, trade marks and service marks, business names and domain names, rights in get-up and trade dress, goodwill and the right to sue for passing off or unfair competition, rights in designs, database rights, rights to use, and protect the confidentiality of, confidential information (including know-how and trade secrets) and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

- 1.2 Clause and paragraph headings shall not affect the interpretation of this agreement.
- 1.3 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.

- 1.4 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.5 A reference to any party shall include that party's personal representatives, successors and permitted assigns.
- 1.6 A reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time.
- 1.7 A reference to a statute or statutory provision shall include all subordinate legislation made from time to time under that statute or statutory provision.

2. ASSIGNMENT

- 2.1 In consideration of the sum of \$1.00 (receipt of which the Assignor expressly acknowledges), the Assignor hereby assigns to the Assignee absolutely with full title guarantee any and all his right, title and interest in and to the Assigned Rights, including:
 - (a) the absolute entitlement to any registrations granted pursuant to any of the applications comprised in the Intellectual Property Rights;
 - (b) any and all goodwill attaching to the Intellectual Property Rights; and
 - (c) the right to bring, make, oppose, defend, appeal proceedings, claims or actions and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from ownership, of any of the Assigned Rights whether occurring before, on, or after the date of this agreement.
- 2.2 Insofar as the Assigned Rights do not vest under this agreement, the Assignor holds legal title in the Assigned Rights on trust for the Assignee.
- 2.3 To the extent that the Assignor owns or controls (presently or in the future) any Intellectual Property Rights that block or interfere with the rights assigned to the Assignee under this agreement ("Related Rights"), the Assignor hereby grants or will cause to be granted to the Assignee a non-exclusive, royalty-free, irrevocable, perpetual, transferable, worldwide licence (with the right to sublicense) to make, have made, use, offer to sell, sell, import, copy, modify, create derivative works based upon, distribute, sublicense, display, perform and transmit any products, software, hardware, methods or materials of any kind that are covered by such Related Rights, to the extent necessary to enable the Assignee to exercise all of the rights assigned to the Assignee under this agreement.

3. MORAL RIGHTS

The Assignor waives absolutely any moral rights arising under the Copyright, Designs and Patents Act 1988 in relation to the Assigned Rights and, so far as is legally possible, any broadly equivalent rights he may have in any territory of the world.

4. WARRANTIES

The Assignor warrants that:

- (a) he is the legal and beneficial owner of, and owns all the rights and interests in, the Assigned Rights;
- (b) he has not licensed or assigned any of the Assigned Rights;

- (c) the Assigned Rights are free from any security interest, option, mortgage, charge or lien;
- (d) he is unaware of any infringement or likely infringement of any of the Assigned Rights;
- (e) so far as they are aware, all the Assigned Rights are valid and subsisting and there are and have been no claims, challenges, disputes or proceedings, pending or threatened, in relation to the ownership, validity or use of any of the Assigned Rights; and
- (f) so far as he is aware, exploitation of the Assigned Rights will not infringe the rights of any third party.

5. FURTHER ASSURANCE

The Assignor shall, at his own cost, perform (or procure the performance of) all further acts and things, and execute and deliver (or procure the execution or delivery of) all further documents, required by law or which the Assignee requests, to vest in the Assignee the full benefit of the right, title and interest assigned to the Assignee under this agreement, including:

- registration of the Assignee as applicant or (as applicable) proprietor of the Assigned Rights; and
- (b) assisting the Assignee in obtaining, defending and enforcing the Assigned Rights, and assisting with any other proceedings which may be brought by or against the Assignee against or by any third party relating to the Assigned Rights.

6. WAIVER

No failure or delay by a party to exercise any right or remedy provided under this agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

7. ENTIRE AGREEMENT

- 7.1 This agreement constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.
- 7.2 Each party agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement. Each party agrees that it shall have no claim for innocent or negligent misrepresentation or negligent misstatement based on any statement in this agreement.

8. VARIATION

No variation of this agreement shall be effective unless it is in writing and signed by the parties (or their authorised representatives).

9. SEVERANCE

9.1 If any provision or part-provision of this agreement is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make

it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this clause shall not affect the validity and enforceability of the rest of this agreement.

9.2 If any provision or part-provision of this agreement is invalid, illegal or unenforceable, the parties shall negotiate in good faith to amend such provision so that, as amended, it is legal, valid and enforceable, and, to the greatest extent possible, achieves the intended commercial result of the original provision.

10. COUNTERPARTS

- This agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute a duplicate original, but all the counterparts shall together constitute the one agreement.
- 10.2 Transmission of the executed signature page of a counterpart of this agreement by (a) fax or (b) e-mail (in PDF, JPEG or other agreed format) shall take effect as delivery of an executed counterpart of this agreement. If either method of delivery is adopted, without prejudice to the validity of the agreement thus made, each party shall provide the others with the original of such counterpart as soon as reasonably possible thereafter.
- 10.3 No counterpart shall be effective until each party has executed and delivered at least one counterpart.

11. THIRD PARTY RIGHTS

No one other than a party to this agreement, their successors and permitted assignees, shall have any right to enforce any of its terms.

12. GOVERNING LAW

This agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of the province of Alberta, Canada.

13. JURISDICTION

Each party irrevocably agrees that the courts of Alberta, Canada shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this agreement or its subject matter or formation (including non-contractual disputes or claims).

This document takes effect on the date stated at the beginning of it.

Signed by Igor Kovalchuk

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Executed by **Darryl Hudson** for and on behalf of **InPlanta Biotechnology**

Memorandum of Understanding

between

InPlanta Biotechnology Inc. (InPlanta)

and

Igor Kovalchuk (Igor)

This Memorandum of Understanding (MOU) sets forth the terms and understanding between the InPlanta Biotechnology Inc. and Igor Kovalchuk, Professor at the University of Lethbridge to develop the contractual relationship.

Background

InPlanta Biotechnology is working on development of efficient genotyping techniques for marijuana and hemp. At the same time, Igor Kovalchuk is a researcher and a professor at the University of Lethbridge who is working in the area of plant biotechnology, genomic and epigenomics. Igor Kovalchuk holds the section 67 license (2016/7548) from Health Canada to work with medicinal poppy. Igor Kovalchuk is familiar with all procedures necessary to obtain similar license to work with cannabis and is interested in obtaining such license.

InPlanta is interested in research and development project with Igor Kovalchuk to develop new cannabis and hemp varieties. The work will include but is not limited to for profiling 50-100 marijuana/hemp varieties for genomic sequencing, transcriptome and DNA methylome analysis. The details of R&D project will be further elaborated when such license is received by Igor Kovalchuk.

An initial step of this collaborative project is the application for the section 67 license for research involving cannabis. Igor will apply for this license and prepare the site at the University of Lethbridge to comply with all security requirements.

Payments/Invoicing

InPlanta will finance R&D project conducted and supervised by Igor. The details of the project scope and financing will be elaborated further.

Duration

This MOU is for the whole period of time necessary for the completion of the project - complete genomic/transcriptomic analysis of hemp/marijuana lines requested by InPlanta. This MOU shall become effective upon signing by the authorized officials from the InPlanta Biotechnology and Igor Kovalchuk. and will remain in effect until modified or terminated by any one of the partners by mutual consent.

Contact Information

InPlanta Biotechnology Inc.

Darryl Hudson

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Raymond, Alberta, T0K 2S0

E-mail: doc@thedocsolutions.com

Igor Kovalchuk, Professor

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University of Lethbridge

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Lethbridge AB

T1K 3M4 CANADA

E-mail: igor.kovalchuk@uleth.ca

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Memorandum of Understanding

between

InPlanta Biotechnology Inc.

and

Plantbiosis Ltd.

This Memorandum of Understanding (MOU) sets forth the terms and understanding between the InPlanta Biotechnology Inc. and the Plantbiosis Ltd. to develop the contractual relationship.

Background

InPlanta Biotechnology is working on development of efficient genotyping techniques for marijuana and hemp. At the same time, Plantbiosis provides services in plant biotechnology and next generation sequencing. In addition, Plantbiosis has full access to the molecular biology and tissue culture facilities at the University of Lethbridge.

InPlanta is interested in contracting Plantbiosis for profiling 50-100 marijuana/hemp varieties for genomic sequencing, transcriptome and DNA methylome analysis.

Payments/Invoicing

Plantbiosis will invoice InPlanta upon completion of each NGS project.

Duration

This MOU is for the whole period of time necessary for the completion of the project – complete genomic/transcriptomic analysis of hemp/marijuana lines requested by InPlanta. This MOU shall become effective upon signing by the authorized officials from the InPlanta Biotechnology and the Plantbiosis Ltd. and will remain in effect until modified or terminated by any one of the partners by mutual consent.

Contact Information

InPlanta Biotechnology Inc.

Darryl Hudson

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Plantbiosis Ltd.

Igor Kovalchuk

Director

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E-mail: igor.kovalchuk@plantbiosis.com

Hudson Dec26/2015

Welder 2015