



Getting farming R&D Tax Incentive claims right

Specific Issue Guidance

What do companies and their tax advisers need to consider when self-assessing the eligibility of R&D activities specifically associated with farming (including plantations, orchards, vineyards and fibre growing)?

This Guidance should be read in conjunction with the [R&D Tax Incentive: A Guide to Interpretation](#). The *Guide to Interpretation* should be read before and during the assessment of the eligibility of activities.¹

The department publishes guidance on business.gov.au to assist companies and tax advisers understand the eligibility requirements that apply to activities that are supported under the R&D Tax Incentive. Key benefits of following the guidance are:

- enabling companies to self-assess and register eligible R&D from the beginning
- helping companies avoid compliance reviews, which may involve additional legal fees and tax agent fees, and
- helping companies avoid potential repayment of the tax benefit.

Introduction

The purpose of the *R&D Tax Incentive* is to encourage companies to conduct experimental R&D activities that might not otherwise be undertaken.

This guidance highlights key issues that companies and their tax advisers must consider when assessing the eligibility of specific agriculture-related activities for registration under the *R&D Tax Incentive*. In particular, it highlights issues relating to:

- large-area farm production
- new knowledge
- systematic progression of work
- significant purpose of generating new knowledge, and
- other problem areas that companies and their R&D tax

¹ The department's guidance on the *R&D Tax Incentive*, including the *Guide to Interpretation*, are available on business.gov.au.

advisers most frequently get wrong.

To apply to register R&D activities, a company needs to consider each of the activities it has conducted and assess which of them are:

- eligible core R&D activities²
- eligible supporting R&D activities,³ and
- ineligible activities that cannot be registered with the *R&D Tax Incentive*.

To self-assess the eligibility of their activities, companies must understand and apply the definition of eligible R&D activities under the *R&D Tax Incentive* to each of those activities.

Only activities that are self-assessed as eligible R&D activities can be registered with the Department of Industry, Innovation and Science (the department) under the *R&D Tax Incentive*.

Agricultural activities are subject to the same eligibility tests for the *R&D Tax Incentive* as activities conducted in any other sector.

Summary

Companies must describe in writing their eligible core R&D in accordance with the definition of a core R&D activities listed in the *Income Tax Assessment Act 1997*. This may involve developing new ways to overcome specific technical or scientific challenges.

Eligible core R&D is not learning how to use existing products, technologies or techniques in the manner in which they

are designed to be used. Eligible R&D is not using such products, technologies or techniques in a specific application.

When companies choose to register R&D activities relating to agriculture, they must demonstrate for each core R&D activity they wish to register:

- how the experimental activity was carried out
- that the activity was for the development of a new or improved product or process
- that the activity was conducted for a significant purpose of generating new knowledge
- how the activity applied a systematic progression of work, and
- that the outcomes could not be known or determined in advance on the basis of current knowledge, information or experience.

Companies must clearly explain the activities and support their explanation with evidence.

It will not be sufficient for a company claiming a core R&D activity to rely on propositions such as:

- an established product or practice has not been used before on a particular location or a particular crop
- a combination of established products or practices has not been used before on a particular location or a particular crop

² Under section 355-25(1) of the *Income Tax Assessment Act 1997*.

³ Under section 355-30 of the *Income Tax Assessment Act 1997*.

- the nutrient composition of the soil at a particular site is unknown
- it was cost effective to apply an experimental treatment to the whole farm (or orchard, plantation, vineyard, etc) while testing it on an experimental plot.

Just because an activity is **new to a location** does not mean that the activity is necessarily experimental within the meaning of the *R&D Tax Incentive* legislation.

Companies and their advisors must be careful not to confuse tests that gather data with hypothesis-driven experiments.

Using established techniques in the manner for which they were designed is not, of itself, experimental.

Activities that are eligible under the R&D Tax Incentive

Core R&D activities

Role of the experiment and hypothesis

Activities that are eligible for support under the *R&D Tax Incentive* fall into two categories: core R&D activities⁴ and supporting R&D activities.⁵

Core R&D activities are activities that involve an experiment that is conducted in a systematic and planned manner. They will be designed around a specifically

⁴ For the words used in the legislation see section 355-25(1) of the *Income Tax Assessment Act 1997*.

⁵ For the words used in the legislation see section 355-30 of the *Income Tax Assessment Act 1997*.

targeted and developed problem statement—called a hypothesis—that proposes a relationship between variables which would be proven right or wrong by observing and evaluating the results after conducting the experiment.

As companies seek improvements in yield or quality; different products, methodologies or technologies may be trialled or used. These trials may involve, for example, off-the-shelf herbicides, soil improvers or harvesting equipment. To be eligible for the *R&D Tax Incentive*, trials conducted on a farm must be clearly distinguished from normal non-R&D activities carried out as part of ordinary or general farming practices. Trial activities must be more than changing farming practices applied to a particular farm, trial and error testing, or the validation of available alternatives.

A core agriculture-related R&D activity could include, for example,⁶ experiments necessary to **develop and test** new or improved products or processes in:

- irrigation
- pest management
- harvesting.

1. Systematic progression of work

The manner in which agricultural trials are conducted on a commercial property, and records generated as a result, can provide a good indication of whether

⁶ These examples are not prescriptive and are offered for illustrative purposes only. The full eligibility criteria must be considered for each activity that is being self-assessed for eligibility as a core R&D activity.

experimental activities that satisfy the requirement for a systematic progression of work have taken place. A well planned trial that identifies and controls as many variables as possible in order to isolate and evaluate each of the interventions (against a control plot), ideas or treatments being tested, is a good indication that an experiment within a relevant systematic progression of work has been conducted to address a specific hypothesis. It is also a good indication that the activity has been conducted for a significant purpose of generating new knowledge.

For example, in order to test the effectiveness of a next-generation insecticide that a company is developing, a company would need to record and compare observations of the product's application on crops against the same crops that have not been treated, in a way that is designed to minimise (control) the influence of any other factors.

Scientifically valid results will only be obtained from a properly designed experiment with sufficient trial plots to provide statistically valid measurements. This is a basic requirement for a *core R&D activity*.

An experiment in a farming context must be hypothesis-driven, with the test designed to observe, measure and evaluate the particular effect or change while isolating it as much as possible from the other factors that might interfere.

Clearly defining the scale of the trial is important in distinguishing a systematic progression of work from ordinary farming activities. Due consideration should be given to the design of the experiment, the sample size, as well as an

equivalent sample plot. This provides a base reference to observe and evaluate the effect that is being tested. It is also necessary to capture data such as crop growth and yield from both experimental and reference sites and appropriate analysis (e.g. to demonstrate the success or otherwise of the farming techniques being researched). However, if data being collected are not aligned with what is being claimed as the experiment (e.g. data are being collected from a much smaller or much larger area), it points to the scope of the experimental activities not being properly defined.

Once a plot or sample size has been determined to be large enough to produce representative results, further increasing the size will not improve the accuracy of results and is therefore no longer eligible for support under the *R&D Tax Incentive*. In applying to register for the *R&D Tax Incentive*, entities will need to adequately justify the chosen plot size. Additional considerations that may impact the chosen plot size include the need to:

- minimise the influence of a treatment on adjoining plots or samples
- permit the use of standard farming equipment.

For example, if testing the resistance of a crop sprayed with a new insecticide against a highly mobile pest such as fruit fly, it may be necessary to test a larger plot to account for the variability in pest presence. If the company uses a four-row harvester, and harvesting is a necessary part of the trial, then it would be practical to design a trial based on multiples of four rows.

The *R&D Tax Incentive* is intended to support only experimental activities that are conducted to generate new knowledge and activities that directly support those experimental activities, and not the business of farming in general. While it may be practical for cost and workload reasons to apply a treatment to a larger area, such as the whole farm, at the same time the treatment is applied to an experimental plot, the application to the larger area is not necessary to resolve the hypothesis, and so will not have a significant purpose of generating new knowledge. It also suggests that there is a commercial level of confidence about the outcome, which would require strong evidence to be available to demonstrate a significant purpose of generating new knowledge. Hence, the broader application will be unlikely to be eligible for support under the *R&D Tax Incentive*.

The use of an excessively large plot to run an experiment strongly suggests that the company is confident of the outcome of the experiment. This may result in the activities being examined by the department and possibly ruled ineligible. The key is in demonstrating that a scientifically valid methodology has been used to conduct the experiment and that appropriate controls are in place for comparison and validation of the experimental results. It would be unlikely that a new treatment to an area of a farm or to the whole farm would be considered an eligible R&D activity if there is no scientifically valid experimental design with control plots to measure the impact of the new treatment compared to other areas not using it.

Generating new knowledge

1. Outcomes that can be resolved with existing knowledge

The eligibility criteria require that the outcome of experimental activities could not be known or determined by a competent professional in the relevant field of knowledge by applying existing:

- knowledge (including sources of professional information such as journals, databases and networks to which they can reasonably gain access)
- experience, or
- skills.

... the outcome [of an experiment] is known or can be determined in advance if a competent professional in the field knows, or can determine, whether the hypothesis is true or false, without having to undertake a systematic progression of work.

R&D Tax Incentive: A Guide to Interpretation, p11.

The outcome of an experiment is the understanding that is generated about whether the hypothesis or idea tested by the experiment is right or wrong. It is not sufficient that there is some uncertainty about the specific test results themselves. Rather, the uncertainty in the outcome must be tied to the need to conduct an experiment itself.

The uncertainty must lie in whether the hypothesis or idea being tested will hold, not in the particular results that will be obtained.

If an agricultural process, technology or product has previously been tested and proven in one context, trials of it in a new

context (whether that is a new geographic location, a new crop, a new soil type, etc) are **unlikely to be considered an eligible core R&D activity**. This is because the underlying scientific concept is likely to be well understood by a competent professional, even if the specific test results in the new context cannot be predicted with absolute certainty.

Where a company wishes to register activities that apply a process, technology or product that is already known to work, it is up to the company to make the case that there is a scientific uncertainty due to a specific feature of the new location or context that cannot be resolved on the basis of existing knowledge. Uncertainty around the degree to which the known technology works in a new environment will not be sufficient to satisfy the requirements of a *core R&D activity*.

For example, a type of fertiliser may have been developed to target uptake of a particular nutrient. A company may choose to trial this fertiliser in the unique conditions on its property. While it may not be possible to predict the exact increase in crop yield when using this fertiliser, a competent professional would already understand how the fertiliser works to increase nutrient uptake. There is no unknown factor in the scientific or technical concept underlying the fertiliser composition. Accordingly, this type of activity is not eligible as a core R&D activity.

Significant purpose of generating new knowledge

Core R&D activities must be undertaken for at least a significant purpose of generating new knowledge about whether the hypothesis is right or wrong.

Where activities are being conducted that are production farming activities, it is obvious that they have a **purpose of generating production**. When companies are self-assessing whether specific activities are *core R&D activities*, they must consider whether there is evidence that the activities are being conducted for a **significant purpose of generating new knowledge**. This step is essential to correctly self-assessing the purpose of the activity conducted. In the words of the Administrative Appeals Tribunal:

... the purpose of generating new knowledge must be more than an insubstantial purpose; it must be substantial enough to enable the activity to be accurately characterised as conducted for that purpose [JLSP and Innovation Australia [2016] AATA 23 (22 January 2016) at 52].

If a production activity is being carried out across a whole farm, it is not likely that the activity is being conducted for a significant purpose of generating new knowledge. It is more likely that a known technique or product is being used that will not risk the production of the whole farm.

For example, if the application of a particular soil improver or soil management technique is being conducted over a large area, and any data being collected is over a much smaller area, then it is not likely that all of the activity over the whole area is being conducted for a significant purpose of generating new knowledge. In these circumstances, experimental plots for the generation of new knowledge must be clearly defined, together with the hypothesis and experimental/scientific

design and methodology applied to such trial plots.

Projects are not eligible

Eligible activities must be specific activities; eligibility does not apply to projects.

When conducting research and development, companies tend to think in terms of projects and project outcomes rather than in terms of the specific activities that the company conducts within and as a component of a project. However, the eligibility criteria under the *R&D Tax Incentive* require eligibility to be assessed at the level of specific activities.⁷

During the self-assessment process, companies must be careful to recognise that eligibility under the *R&D Tax Incentive* is based on identifying specific activities and not based on whole projects or large parts of projects.

It is very unlikely that all of the activities being conducted in an agricultural project would be eligible R&D activities. While companies may conduct some R&D activities as part of a project, that does not make the entire project an eligible R&D activity.

Self-assessment must identify specific experiments and separate any experimental activities and activities that directly support them from routine agricultural activities.

⁷ The *R&D Tax Incentive* is governed by Division 355 of the *Income Tax Assessment Act 1997* and sections 26 to 32 of the *Industry Research and Development Act 1986*. The eligibility criteria for activities are set out in sections 355-20 to 355-30 of the *Income Tax Assessment Act*

1. Specific problem areas

The department has reviewed a number of registered agriculture activities and found they were not eligible for the *R&D Tax Incentive*.

In many cases companies registering their activities are describing whole-of-farm activities and/or activities with outcomes that could have been known or determined by competent professionals.

Feedstock adjustments and excluded expenditure

Companies should also note that if they receive, or become entitled to receive, amounts for the results of their claimed R&D activities (including from granting access to the results, or the rights to use the results, or an amount for conducting the activities, or the sale of products or services arising directly from the activities) they will need to consider the effect of sections 355-405, 355-410, 355-465 of the *Income Tax Assessment Act 1997*. These sections operate to increase taxable income or prevent expenditure from being claimed for the R&D offset where a company has or will receive consideration⁸ from claimed R&D activities. The department and the ATO have published guidance on feedstock which is available on business.gov.au and ato.gov.au respectively.

Supporting R&D activities

1997. Activities should be described in detail on the *R&D Tax Incentive* registration form.

⁸ Section 355-465 also provides for circumstances where the results are applied by the company to its own use, other than for registered experimentation.

Supporting R&D activities are activities that have a direct, close and relatively immediate relationship with a core R&D activity.

Activities that make a direct contribution to the conduct or evaluation of the experiment are likely to meet this requirement. Where an activity is:

- excluded from being a core R&D activity
- one that produces goods or services, or
- one that is directly related to producing goods or services

that activity will only be a supporting R&D activity if it is undertaken for the *dominant purpose* of supporting a core R&D activity. *Dominant purpose* means the ruling, prevailing or most influential purpose.

Examples of where a supporting R&D activity may be identified in the agriculture sector, where the correlating core R&D activity exists, could include:

- irrigation, application of fertilizer and harvesting of an experimental plot
- non-standard measurements of plants grown in reference (or control) plots.⁹

Some activities are excluded from being core R&D activities by the legislation.

However, some excluded activities may in fact be supporting R&D activities, but only in certain circumstances.

1. Direct, close and relatively immediate relationship to a core R&D activity

To fulfil the 'directly related' requirement, an activity must have (and be able to demonstrate to the department) a direct, close and relatively immediate relationship to the systematic progression of work in a core R&D activity. Activities that do not have this relationship are not supporting R&D activities.

For example, if testing the influence of a chemical application to 4 rows of crops¹⁰, normal farming activities such as sowing, watering and harvesting those rows could be considered as supporting the core R&D activities as they are necessary to undertake the experiment and are directly related to it. However, applying the same chemical to other areas of the farm because it is cheaper or easier to do so is not directly related to the experiment and will not be eligible.

2. Undertaken for the dominant purpose of supporting a core R&D activity

An activity that produces goods or services, or is directly related to the

⁹ These examples are not prescriptive and are offered for illustrative purposes only. The full eligibility criteria must be considered for each activity that is being self-assessed for eligibility as a supporting R&D activity, including, where

necessary, whether the dominant purpose test is satisfied.

¹⁰ That is, a systematic and sufficiently defined testing activity to meet the requirements of a core R&D activity.

production of goods or services,¹¹ must also be undertaken for the dominant purpose of supporting the core R&D activity.

Dominant purpose means the ruling, prevailing, or most influential purpose. The dominant purpose does not need to be more important than all of the other purposes combined, but it does need to be the most important of any of the purposes.

R&D Tax Incentive: A Guide to Interpretation, p20.

Trials conducted by a primary producer are likely to produce goods or services. The onus is on the company to demonstrate that the dominant purpose of any potential supporting activity that produced goods, or was related to the production of goods, was to support experimental activities and not to support commercial outcomes. The company must also be able to demonstrate that the dominant purpose of supporting the core R&D activity was **held at the time** the activity was conducted.

For example, if a company is testing a prototype of a radical new design of irrigation system, and to ensure bare soil, has a team hand weeding the test plots three times as often as the rest of the cropped area is weeded, it is likely to be able to demonstrate through its trial design documents that the more frequent weeding is for the dominant purpose of supporting the core R&D activities.

If an activity is being conducted for farming production purposes, it is not likely that it will have the dominant purpose of supporting an experiment. This is particularly so where the activity is being carried out across the whole farm or a large part of it. For example, claiming that harvesting the whole production of the farm is a supporting R&D activity is unlikely to be reasonably arguable.

Documentation generated at the time and record keeping

If a company does not have evidence that was generated at the time an activity was conducted, or before in the case of planning documents, showing that it meets all the eligibility criteria, then that activity is not eligible. This is a basic step in any company's self-assessment of eligibility.

The Administrative Appeals Tribunal has consistently found that R&D activities claimed without evidence that substantiated eligibility are not eligible. For example, it has stated that an 'applicant cannot succeed in establishing [the eligibility] requirements in the absence of detailed documentation recording the process of each activity as it develops' (*Docklands Science Park Pty Ltd v Innovation Australia [2015] AATA 973 at 63*).

When a company is self-assessing whether activities are eligible R&D activities, it cannot simply assert or effectively argue that it thinks an activity was eligible if it does not have evidence to

¹¹ Or it falls within one of the core R&D activity exclusions listed in section 355-25(2) of the *Income Tax Assessment Act 1997*.

support its self-assessment. If it does not have evidence to substantiate eligibility of an activity, then it will not be reasonably justifiable to register that activity or claim expenditure for it.

Documentation and records must demonstrate all eligibility requirements are met and particularly:

- show how the experiments were undertaken
- show how the company assessed that the outcome of the activities could not be known or determined in advance
- be sufficient to verify the:
 - amount of the expenditure incurred on the registered activities
 - relationship of the expenditure to the activities
- show how expenditure was apportioned between eligible R&D activities and non-R&D activities.

It is the company's responsibility to demonstrate that it has used reasonable methods to differentiate between expenditure on R&D activities and expenditure on non-R&D activities.

Further assistance

To assist companies properly address their self-assessment obligations, both the department and the Australian Taxation Office provide detailed, plain-English guidance about eligibility and record-keeping requirements necessary to support eligibility:

- [R&D Tax Incentive: A Guide to Interpretation](#)
- [R&D Tax Incentive: Record-Keeping and R&D Planning](#)
- [Research and development tax incentive: keeping records and calculating your notional deductions](#)
- [Research and development tax incentive – feedstock adjustments](#)
- [Can an R&D entity choose not to claim feedstock input and avoid feedstock adjustments?](#)

Disclaimer

This guidance document is intended to provide useful information for companies considering accessing *the R&D Tax Incentive*. However, it is not exhaustive and it is not legal or financial advice. It is your responsibility, with the assistance of any advice you wish to seek, to satisfy yourself about the eligibility of your activities for the *R&D Tax Incentive* as set out in the *Income Tax Assessment Act 1997*. The Commonwealth disclaims all liability for any loss or damage arising from you or anyone else relying on this document or any statement contained in it.