Appendix

REGULATION IMPACT STATEMENT

(Office of Best Practice Regulation ID No 11249)

REGULATIONS FOR GINGER INDUSTRY

RESEARCH AND DEVELOPMENT LEVY

Background

The Australian ginger industry is concentrated in south-east Queensland from the Sunshine Coast to Bundaberg. There are currently 49 growers who are represented by 37 separate business entities. There are three major producers with 100 acres under production, 10 medium producers with approximately 10 acres under production, with the remainder being smaller producers with one to two acres under production. The industry employs approximately 200 full-time farmhands and approximately 385 casual staff during peak harvesting periods.

Ginger production averages 8,000 tonnes annually. Fifty-five per cent of production is directed to four processors located between Brisbane and Bundaberg. The dominant processor is Buderim Ginger Limited located at Yandina on the Sunshine Coast. The other forty-five per cent of production is supplied to the fresh market and mostly sold through the capital city wholesale markets.

A disease, Pythium, and a pest, Symphylid, are having a major impact on the supply of ginger. Processors are no longer receiving an adequate supply of ginger because of the destruction the disease and the pest have already caused.

- *Pythium myriotylum* is a disease of ginger first identified by growers in the 2007-08 growing season, with some producers experiencing total crop losses
- the arthropod Symphylid is a wingless soil inhabiting creature which feeds on root tips and hair of the ginger plant and impairs the plant's ability to absorb nutrients, thus restricting plant growth and development. Several species have been found to affect a number of crops in south-east Queensland including ginger and pineapples.

Based on early harvest intake volumes to Buderim Ginger Limited and further forecasts for second and third intakes, the projected crop losses in the 2010 harvest period may be close to 2,700 tonnes. This total is made up of 1,300 tonnes early harvest shortfall, 200 tonnes in second and third harvest projected shortfalls and up to 1,200 tonnes in annual fresh market shortfall and farm grown seed shortfall for the 2011 crop. This equates to a projected 33.75 per cent loss of an annual 8,000 tonne yield.

Assessing the problem

Industry believes research will provide a solution to the problem. The Australian Ginger Growers Association Inc (AGGA) has made a submission to the Minister to introduce a new statutory research and development (R&D) levy on ginger growers to be paid to the Rural Industries

Research and Development Corporation (RIRDC). The AGGA proposal is for an *ad valorem* levy of a half of one per cent (0.5%) on the sale of fresh ginger, seed ginger, organic ginger and ginger for processing, to be collected at the first domestic point of sale. Exemptions will apply to fresh ginger sold on the export market, ginger sold direct to the public through farmers markets and roadside stalls and seed ginger used by seed producers to grow their own ginger.

AGGA believes that without investment in R&D to control diseases and pests the Australian ginger industry risks becoming unviable. In particular, AGGA wishes urgent research to be undertaken on trials for the control of the organisms Pythium and Symphylids.
The urgency in addressing the above disease and pest problem has led AGGA to provide a $30,000 voluntary contribution to Horticulture Australia Limited (HAL) to enable research to commence before a statutory levy is enacted. The research expenditure will attract Australian Government matching payments and is a co-operative effort between HAL, RIRDC and the Queensland Government Department of Employment, Economic Development and Innovation. Approximately $200,000 is expected to be available for this research.

AGGA believes the industry has other R&D needs, including:

- development of a soil health diagnostic system
- research and documentation of a certified seed scheme
- role of soil moisture in ginger yield at early harvest
- mechanisation: further research into harvest contracting
- a seed treatment trial to determine best-practice for ginger establishment
- integration of minimum tillage, crop rotation and organic amendments into a ginger farming system, and the impact of various systems on yield and soil-borne diseases.

There has never been a statutory R&D levy on ginger growers. To implement the AGGA request would require amendments to the Primary Industries (Excise) Levies Regulations 1999 and the Primary Industries Levies and Charges Collection Regulations 1991 made under the *Primary Industries (Excise) Levies Act 1999* and the *Primary Industries Levies and Charges Collection Act 1991*.

Objectives of government action

The objective is to enable the ginger industry to establish a consistent source of funding for R&D requirements identified by the industry. This would assist the industry to conduct trials to control diseases and pests which are threatening its long term viability, and to support other information needs in the longer term.

The *Primary Industries and Energy Research and Development Act 1989* was enacted to provide for the undertaking of research and development (R&D) relating to primary industries. The Act established RIRDC which is funded through Australian Government appropriations, by statutory levies and export charges, and by Australian Government matching payments for eligible R&D expenditure. RIRDC would be the body to manage funds collected from the proposed R&D levy to be imposed on ginger growers.

Options that may achieve the objective

Option 1 - Status Quo

Under this option the current level of funding for R&D to control diseases and pests would remain at a low level, and address other information needs would be dependant on actions of a few growers.

Option 2 – Implement a Voluntary Levy System or Utilise Industry Cooperative and Private Research Providers

Ginger growers could be asked to pay voluntary contributions for the purpose of raising monies to fund R&D activities. Individual growers, industry cooperatives and/or groups of growers could undertake R&D activities.3Option 3 – Implement the proposed Statutory Levy

The Government could accept the AGGA proposal to establish a new statutory R&D levy on ginger growers at an *ad valorem* rate of 0.5 per cent on the sale of fresh ginger, seed ginger, organic ginger and ginger for processing, to be collected at the first domestic point of sale. Exemptions would apply to fresh ginger sold on the export market, ginger sold direct to the public through farmers markets and roadside stalls and seed ginger used by seed producers to grow their own ginger.

Impact analysis – costs, benefits and risks

Impact group identification

Establishing a reliable source of funds available for ginger R&D is expected to principally affect growers and the dominant processor, who would pay the levy and thus have reduced net income. The levy would also indirectly affect other businesses located in ginger growing communities and on suppliers/customers of growers (for example - other processors, farm workers, machinery suppliers, transporters and wholesalers), who depend on the levy payers for their business.

Buderim Ginger Limited, which is the largest ginger factory in the Southern Hemisphere and the largest food processor on the Sunshine Coast, as well as a major tourist attraction, would be seriously affected if the Australian ginger industry became unviable.

Funds for ginger R&D should be obtained from the Australian ginger industry, as ginger growers and Buderim Ginger Limited would be the major beneficiaries of the outcomes achieved by the R&D work. Undertaking essential R&D is aimed at maintaining the supply of ginger and thus maintaining processing operations and full-time and casual employment within the industry.

Option 1 – Status Quo

The AGGA maintains that change is needed to secure the industry’s future. Continuing the *status quo* would mean the ginger industry would have insufficient funds to undertake the essential R&D

required to combat diseases and pests which are already affecting supply of product and which threaten the long term viability of the industry.

The risk under this scenario is that there is unlikely to be any reduction in the diseases and pests and growers would continue to suffer crop losses, local plantings would be taken out of production, processors would face unreliable or dwindling supply and ginger growing communities would experience employment losses.

The ability of ginger growers to move into production of other crops could mitigate the impact on them and ginger growing communities if ginger production becomes unviable. However, there are limits on the extent to which this could occur and a great deal of uncertainty. Some growers may choose to manage their farm producing a smaller quantity of ginger or they may choose to exit farming completely. Some current ginger growers are former cane farmers who suffered from the closure of Moreton Sugar Mill in 2005.

The current disease and pest affecting existing ginger production together with a lack of research on control methods may limit the capacity for growers to accumulate sufficient capital to grow alternative crops. Any move into alternative crops would be dependent on soil testing which may reveal that the present incursions prevent that option. Also, alternative crops may not provide the same good returns to growers that they are achieving from growing premium-grade ginger.

A long term solution to current and potential future pest and disease incursions is the desired outcome. This requires a stable and equitable funding regime to finance adequate R&D.

Option 2 – Implement a Voluntary Levy System or Utilise Industry Cooperative and Private Research Providers

A free-rider problem would exist under a voluntary levy system option. As a result it is unlikely that an individual grower or group of growers would provide the necessary level of funding for the R&D. Additionally, the industry would be unlikely to generate consistently the required quantum of funding that the AGGA believes is necessary to deal with industry's R&D priorities.

In the past, the impetus for any ginger industry R&D has come from a small group of growers known as "quota growers" and Buderim Ginger Limited. Quota growers are defined as those who supply Buderim Ginger Limited under contract. Funds for R&D have been provided irregularly and then only when grower finances would allow. Growers have never been under any compulsion to provide funds. The recent voluntary contribution to HAL of $30,000 has been provided because critical R&D is required to be commenced and the AGGA could not wait until a statutory levy is enacted.

However, AGGA does not want to continue to source funds on an *ad hoc* and inequitable basis. Therefore, AGGA proposes to underpin the viability and development of the Australian ginger industry through establishing a sufficient, equitable and consistent source of funds from a levy on growers and processors. These funds will be used to finance the essential R&D that AGGA believes is required to protect the industry from pest and disease incursions and to advance the industry.

Ginger directed to Buderim Ginger Limited for processing accounts for a significant proportion of all ginger sales. Only quota suppliers to Buderim Ginger Limited have contributed to voluntary levies in the past. However, the destructive diseases and pests threatening ginger crops affect all growers.

The overwhelming vote in favour of the levy (details provided at page 7) provides evidence that most growers, irrespective of their size and market, want a compulsory levy put in place as they realise the survival of their industry depends on undertaking critical R&D. It was growers who supply the fresh market who in part provided the impetus for a statutory levy proposal to be put to all growers to formalise an arrangement whereby regular and equitable contributions could be made.

Under a voluntary levy system it would be difficult to forecast who would make contributions in any given year. A voluntary levy system would make funding inconsistent and unpredictable and in turn would make it difficult to plan R&D programs. Further, it is unlikely that voluntary levies would significantly increase to the necessary levels desired by the AGGA. Either the free-riders would need to start contributing levy funds, or those who are willing contributors would need to pay greater amounts.

Any research conducted privately is unlikely to be provided for the benefit of all growers, it is more likely the benefits of the research would be captured privately. In addition, private researchers would also be less likely to pursue research of an industry-wide or public good nature as it would deny them a competitive advantage.

Option 3 – Implement the proposed Statutory Levy

The third option is for the Minister to agree to the AGGA proposal to establish a new *ad valorem* levy of 0.5 per cent on the sale of fresh ginger, seed ginger, organic ginger and ginger for processing, to be collected at the first domestic point of sale for the purpose of undertaking R&D through RIRDC.

A compulsory national levy would address the market failure in R&D applicable to the ginger industry and provide essential funding to sustain the viability of the industry. In addition, the levy would attract Australian Government matching payments for eligible R&D expenditure.

The proposed statutory R&D levy would be compulsory on all ginger growers who supply the domestic market whether to processors or for sale as fresh produce. For the first time all ginger producers would make a financial contribution to fund critical research. Exemptions would apply to fresh ginger sold on the export market, ginger sold direct to the public through farmers markets and roadside stalls and seed ginger used by seed producers to grow their own ginger.

The cost of the R&D levy is likely to be borne by both ginger growers and ginger consumers. Most growers support the imposition of the grower levy as a collective investment in their future. They are willing to bear a medium-term cost for longer-term gain. However, it is likely that a significant proportion of the levy will be passed on to consumers by processors and/or wholesalers through price increases. At a rate of 0.5% of the first point of sale price the proposed levy is assessed to only result in a relatively small increase in retail prices of ginger.

There is not expected to be any significant impact on growers from the levy not applying to imports. Fresh ginger imports for sale on the fresh market are prohibited. However, fresh ginger imported for processing is permitted but conditional upon the processing occurring in quarantine approved premises that are approved specifically for processing ginger and the method of processing is approved by the Australian Quarantine and Inspection Service**.**

Even if the growing of ginger in Australia ceased, there is no guarantee that fresh ginger imports for sale on the fresh market would be permitted. Buderim Ginger Limited and other processors could survive by importing ginger in brine, a semi-processed product. However, this would be a worst-case scenario for Buderim Ginger Limited as it operates as a vertically integrated company and utilises its Yandina tourist facility to sell and promote value-added, high-quality fresh Australian produce.

A 2009 evaluation report of rural R&D *"Measuring economic, environmental and social returns from Rural Research and Development Corporations' investment"* found that for every dollar invested by the 15 rural R&D Corporations, projects returned an average of $11.

Based on an industry gross value of production of $15.6 million and an *ad valorem* levy of 0.5 per cent, annual levy collections would be approximately $78,000.

There would be an annual cost to the Australian Government of $70,000-$80,000 annually through providing matching payments for R&D expenditure. There would be no administrative costs for the Australian Government in collecting and remitting the levy as the Levies Revenue Service of the Australian Government Department of Agriculture, Fisheries and Forestry operates under full cost recovery.

The industry has rated pests and disease as an extreme threat to the viability of the ginger industry. The value of the potential cost could be between one-third and the full value of the industry per annum ($5.6 million-$15.8 million per annum). After key pests and disease threats are eliminated, the industry would be better placed to concentrate research on lowering the costs of production and other aspects that would further develop industry growth.
A good example of prior R&D benefits is illustrated by the project, *Use of tissue culture for ginger propagation and improvement* (project VG 104 - July 1991 to June 1994). As a result of the experimentation involved in this project the results are now used exclusively to provide a clean seed scheme for the industry. Also in respect of the project *Overcoming seed quality problems in the ginger industry* (VG98108 July 1998 to June 2001), all recommendations of that research program were adopted in the industry.

Other examples are minor-use permits for six agricultural chemicals, grower field days and development of best-practice technologies for stakeholders.

The industry in its current funding position is unable to continue to fund the research required to provide for its long term viability, particularly when faced with new pests and diseases, increased food safety requirements and threats of overseas import applications. Growers through the AGGA have invested $30,000 of voluntary contributions to support *Trials to Control Pythium and Symphylids in Ginger*. The AGGA considers this will be the last of the voluntary contributions the quota growers will be able to support.

A R&D levy would enable the industry to have control over its research by addressing the growers' concerns and mapping out research requirements over the long term.

The amount of ginger currently exported is negligible. Export markets for ginger would require considerable development and could be the subject of R&D projects in the longer term. Therefore a significant diversion to export sales to avoid a levy of 0.5 per cent is not anticipated. If export sales do occur in the future that will be an indicator of a mature industry.

The levy would not have a disproportionate impact on a particular group or size of growers, as the percentage of levy payable on the sale of ginger would be the same for all growers, irrespective of size of operation. Additionally, a compulsory national statutory levy would eliminate the potential for 'free-riders'.

Competition Policy

The R&D levy would be applied equitably to all Australian ginger growers. The money to be raised would be utilised solely for R&D activities focussed at assisting the industry as a whole. Hence this R&D should be competitively-neutral in the industry (that is, not favouring or disadvantaging one individual or group in the industry over another). Over time, continuing funding on R&D projects is expected to enhance the viability and profitability of the industry.

Consultation

AGGA conducted a thorough consultation campaign with all known potential levy payers, in line with the *Levy Principles and Guidelines*. The AGGA appointed a steering committee to ensure consultation on the proposed levy was undertaken with members of the Association and non-members. Using personal knowledge of AGGA members, transport companies and wholesalers, the steering committee identified all prospective levy payers, informed them of the proposal and included them on the electoral roll.

On 19 September 2009 a formal letter advising of the proposal was sent to all member and non-member growers. The letter informed growers where they could obtain more information on the proposal, including a website address and an offer of a personal visit by a member of the steering committee. The version of the letter sent to non-members also included an invitation to attend the Association's Annual General Meeting on 2 November 2009 to receive a further update about the levy proposal.

The proposed R&D levy rate was determined as part of the consultation process. The *ad valorem* rate of 0.5 per cent was considered the most appropriate and equitable type of levy for the industry. Thus a proposition was put to growers, through a ballot process, to support an *ad valorem* levy of 0.5 per cent on the sale of all ginger apart from that product which would be exempted. The voting method considered most equitable was the one vote per producer (business entity) model, which conformed to the AGGA Constitution.

The CEO of Buderim Ginger Ltd, Mr Gerard O'Brien is a member of the Steering Committee which guided the development of AGGA's levy proposal. Mr O'Brien and Buderim Ginger strongly support the proposed levy.

A postal ballot was conducted over a three week period from 9 January 2010 to 28 January 2010. AGGA appointed Mr Bruce Duncan as Returning Officer. Mr Duncan is not a member of the AGGA and has no vested interests in the ginger industry. He does have a professional interest in the advancement of the industry in his capacity as an Agribusiness Project Officer with the Queensland Department of Employment, Economic Development and Innovation.

Mr Duncan relied on advice from the Australian Electoral Commission (AEC) on matters relating to the efficient conduct of the ballot, including confidentiality, production of ballot envelopes and business return envelopes.

37 ballot papers were distributed and 34 ballot papers (91.9 per cent) were returned for counting. The count took place in an office independent of the AGGA and was witnessed by an independent public servant. The result of the ballot was 30 "yes" votes (88.2 per cent) in favour of implementing a statutory R&D levy and four "no" votes (11.8 per cent) against.

Subsequently, attending growers also voted unanimously to advance the levy proposal at an AGGA Quarterly Meeting held on 1 February 2010. Under the AGGA's constitution, successful motions carried at AGGA meetings are those that receive support by a two-thirds show of hands of members present who are eligible to vote.

The *Levy Principles and Guidelines* state that it is a requirement for industry to achieve a majority of those that vote if a new levy is to be implemented. Thus with 88.2 per cent per cent of valid votes in favour on a one vote per enterprise basis, AGGA considers it has achieved a strong mandate for progressing implementation of the R&D levy.

After formal submission of the AGGA proposal to the Minister, the Levy Principles and Guidelines provide for a six week period for industry comment or objections. The six week period which ended on 19 May 2010 was notified by AGGA to all potential levy payers and no dissenting submissions were received.

Conclusion and recommended option

The recommended option is to implement a compulsory R&D levy under the *Primary Industries (Excise) Levies Act 1999* and the *Primary Industries Levies and Charges Collection Act 1991* to fund ginger R&D through RIRDC.

The proposed compulsory national ginger R&D levy is regarded as the only effective means of correcting a market failure in funding R&D that currently exists in the industry. In addition, the statutory R&D levy proposal is regarded as the only equitable means of raising the funds required to undertake the industry's R&D priorities.

The proposal for a national statutory R&D levy for the ginger industry:

- conforms to the *Levy Principles and Guidelines*
- would be applied universally across the levy paying population
- has clear potential to benefit the industry
- is not expected to impose significant costs on consumers.

Implementation and review

The R&D levy is to be implemented as soon as practicable, depending on the legislative process. Following implementation of the levy RIRDC would establish a Ginger Industry R&D Advisory Committee to oversee the development of a five year R&D plan for the industry. The committee would assess R&D projects against the five year plan allowing for any urgent research priorities that may arise in the meantime.

The five year R&D plan would also form the basis against which R&D progress and achievements would be judged. In addition to an annual review and adjustment of the five year plan by the committee, it would be substantially reviewed in year four. RIRDC operates a rolling Benefit/Cost Analysis program and the Ginger R&D Program would be subject to review accordingly.

RIRDC would fully absorb all R&D administration costs for the ginger industry levy resulting in the entire levy collected, together with Australian Government matching payments, being solely used to fund R&D.

There will be no administrative costs for the Government in collecting and remitting the levy as the Levies Revenue Service (LRS) of the Australian Government Department of Agriculture, Fisheries and Forestry operates under full cost recovery. The LRS estimates cost recovery charges would be in the order of $9,000 per levy year – however, a one-off fee of approximately $8,000 associated with the start up of the collection of the R&D levy would also be incurred initially.

Levy issues can be raised and reviewed at AGGA's Annual General Meeting and other AGGA General Meetings held throughout the year. As ginger is only grown from the Sunshine Coast to Bundaberg, most growers are able to attend these AGGA meetings.

The Government does not intend to review the operation of the levy.

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Agricultural Productivity Division
Australian Government Department of Agriculture, Fisheries and Forestry

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