



Recycled Organics Industry 2006 National Research and Development Forum Outcomes

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**Department of
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Introduction

In September 2005, the *Recycled Organics Unit* convened the inaugural *Recycled Organics Research and Development Forum*. The forum was structured over 2 days, day 1 being attended by key researchers in the field from around Australia to share information and experience; and to identify research gaps and priorities. Day 2 was attended by researchers, processors and Government agency representatives to support the transition of research findings into practice.

The forum focused on recycled organics product use in production horticulture/agriculture, focusing on applications to vegetable production, orchard production and vineyards.

Note that *research and development* is used in a broad sense and should be taken to include research into practice (elsewhere extension), and building industry capabilities (industry development).

Researchers in attendance determined that a national forum should be conducted annually, in a manner that was accessible to the relevant research community. Key outcomes of the forum are documented below.

Research and Development Priorities

The forum defined the following as research and development priorities for the sector, all of which target gaps in knowledge of the agronomic performance of recycled organics products, integration into farm management systems, and the value equation for the grower:

1. Define the relationship of soil carbon to farming systems.
2. Quantify irrigation water savings.
3. Quantify N & P mineralisation / nutrient contribution over time.
4. Categorising compost products for different applications:
 - Product development;
 - Performance longevity;
 - Compost maturity;
 - Disease suppression.
5. Quantify off-farm benefits (environmental services value realised by the community).
6. Determine efficacy of inoculants from compost to soils.
7. Determine the preferred application timing (to optimise benefit/minimise risk).
8. Define “carbon based agriculture” – “What is soil health?”
9. Scope and develop a field trial protocol.

Key Policy Issues

The forum documented the following as key issues facing the recycled organics industry:

1. Need for effective incentives / disincentives (regulatory and financial) for the diversion and recovery of organic materials:
 - Who pays for compost quality?
 - Who pays for “environmental services” or sustainability value?
2. Need for level playing field, environmental/health risk based regulation of **all** products to land.
3. How can we sustain productive and healthy soils?
4. Land use planning – loss of agricultural production zones to urban development.

Key Policy Statements

The forum documented the following as key policy statements for the sector:

1. Need for a clear national policy statement promoting carbon based agriculture as fundamental to maintaining productive soils.
2. Need for uniform national framework for organic products for land application.
3. Need to develop an environmental credits trading scheme that goes beyond carbon trading to enable/support environmentally/sustainable agricultural practices.

Annual R&D Forum Organisation

Researchers in attendance agreed that an annual forum should be conducted, and that the development of an R&D plan for the sector is a priority for the next forum. The following was agreed for forum structure and scheduling:

- Agreed that National R&D forum be conducted annually;
- Flinders University (SA) to host 2006 R&D forum (jointly convened by Flinders Bioremediation and EcoResearch) in Sept/Oct 2006;
- The structure of the forum is 2 days as per 2005. Day 1 exclusively for researcher; and day 2 for researchers to interact with industry;
- The forum is informal, not involving submission and presentation of papers;
- The forum must be low cost for attendance/participation by researchers, essential for participation;
- The forum should not be a component part of a larger conference as conference registration fees will exclude participation of a number of key researchers;
- Association with a conference is fine (a couple of days before or after the formal conference) to increase opportunities for industry attendance;
- Ideally the forum should be conducted in conjunction with university break to support attendance;
- Compost Australia proposes to incorporate an allocation for convening the forum into the CA annual budget (and has allocated \$5,000 in 2006);
- Compost Australia proposes to add a third day to the forum for review and finalisation of an industry submission to Standards Australia for revision of AS4454.

Actions to pursue in 2006

1. Comments on AS4454 standard to Katie Webster to collate and forward to Garry Kimble.
2. Bob Paulin to produce draft paper defining & exploring the concept of carbon based agriculture.
3. Pam Pittaway to produce paper on “soil food web”.
4. Information sheets from all to Angus Campbell (ROU).
5. Annual forum:
 - National & annual;
 - No papers;
 - Not part of a conference – no rego fees;
 - Associated with is fine, but not part of;
 - In conjunction with university break to support Qld participation;
 - Propose CA incorporate into annual budget;
 - Flinders University to host next R&D forum – 2 days in SA, Sept/Oct 2006.
6. Review work already done. Requires a 2 page project definition (project requires funding) addressing:
 - identification of gaps;
 - collation/organisation into useful format.
7. Research Trial Protocol to be documented as guide to support consistency and broader application of results. Protocol proposed to include
 - Product / application rate
 - Soil / site
 - Climate
 - Grower contract
 - Control
 - Crop management system
 - Crop
 - Experiment design / research plan