IPNI
International
Plant Nutrition
Institute

TACTICAL PLAN

Brazil

IPNI Brazil Tactical Plan

Agriculture is a very important activity in Brazil, responsible for around 35% of its GDP. The country is one of the main grain producers in the world and also 4th largest in fertilizer consumption (around 31 million tons in 2014).

In recent years, there has been significant improvement within many of Brazil's agricultural regions and crops; however, there is still much more that can be achieved. Some regions and cropping systems await the introduction of feasible adaptations of existing technologies that are able to narrow long-standing yield gaps. Improved fertilizer use is no doubt one of the main issues that needs attention in Brazil.

Need 1: **4R Nutrient Stewardship must become globally adopted as the scientific basis for sustainability.**

IPNI Response:

- Develop and implement 4R activities targeted to the States of Piaui and Rondonia where nutrient use is currently low.
- Develop and implement 4R activities targeted to forage grasses for which nutrient use is currently low.
- Develop and implement 4R activities targeted to coffee for which nutrient use efficiency is currently low.

Need 2: **Nutrient education is inadequate for current and future agronomists.**

IPNI Response:

- In other regions and crops of Brazil not included in Need 1, use a diverse set of educational approaches to improve nutrient use through 4R implementation.
- Enhance IPNI Brazil's presence as a research and education information provider.
- Provide a forum to recognize Brazil's plant nutrition professionals.

Need 3: **Better fertilizer recommendations are needed to boost productivity, economic returns, and environmental stewardship.**

IPNI Response:

- Develop or update tools for determining farm-level nutrient budgets and improving fertilizer recommendations.

Need 4: **Yield gaps must be identified and closed to provide a sustainable food supply.**

IPNI Response:

- Identify and quantify yield gaps for crops of interest in priority regions.
- Document the role of improved plant nutrition for closing yield gaps.

Need 5: **Agricultural sustainability is only maintained by proper nutrient management.**

IPNI Response:

- Periodically update the nutrient budgets for Brazilian agriculture.
- Produce soil fertility surveys for Brazil, starting with the State of São Paulo.
- Evaluate the impact of inadequate nutrient use on soil properties and system productivity.

Real impact on improving nutrient management within Brazil will only be achieved once the specific regions and cropping systems that are most affected by inadequate soil fertility management are identified. IPNI Brazil considers nutrient budgets and soil fertility surveys to be excellent tools for documenting and prioritizing the areas that require the most attention.

IPNI Brazil is concentrating its efforts on both increased nutrient use and nutrient use efficiency, depending on the priorities of the specific cropping system. IPNI Brazil will continue to monitor the status of nutrient use within the country and strive to positively influence its direction.

IPNI develops and promotes scientific information for the responsible management of plant nutrition for the benefit of the human family.

IPNI
INTERNATIONAL
PLANT NUTRITION
INSTITUTE

Brazil Program

Dr. Luís Prochnow, Director, lprochnow@ipni.net
Dr. Valter Casarin, Dep. Director, vcasarin@ipni.net
Dr. Eros Francisco, Dep. Director, efrancisco@ipni.net

Regional Website: brasil.ipni.net

IPNI Website: ipni.net
IPNI E-mail: info@ipni.net

December 2015