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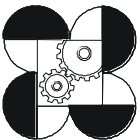
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ISSN 1656 – 6831

Livelihood Technology Series 53



GARLIC & ONION Processing



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‘Our Business is Industry...’

1st edition 2015

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ACKNOWLEDGEMENT

This brochure was made possible through the research efforts of the Food Processing Division (FPD), ITDI-DOST.

GARLIC and ONION PROCESSING

INTRODUCTION

Garlic (*Allium sativum L.*) is an erect herb, grown as an annual from small bulbs called cloves.

It is a dry season crop which contributed P902.3M to the local economy in 1997.

On account of trade liberalization, local garlic faces stiff competition with lower-priced imports.

To counter this, the Department of Agriculture (DA) and the Department of Science and Technology (DOST) actively searched for relevant R&D interventions on garlic production, post-harvest and marketing.

VARIETIES

- Ilocos White
- Ilocos Pink
- Nueva Ecija Pink
- Nueva Ecija White
- Batanes White
- Batangas White
- Cabuyao White
- Mindoro White

USES

- indispensable ingredient in sautéés
- popular condiment for flavouring meat, fish and salads
- known to reduce blood sugar and cholesterol levels
- per capita consumption was 0.32 kg/yr

MAIN PRODUCTS OF GARLIC

- **Garlic Oil Capsules, Dried Garlic Products, Garlic Extract**
- **Garlic Oil:** The volatile oil is obtained by steam distillation from the crushed bulbs or cloves of the common garlic plant. Garlicin is the main content in garlic oil.
- **Garlic Powder** is obtained from peeling, drying and pulverizing of Garlic bulbs which are commonly available as vegetable additives. Garlic powder can be manufactured by automatic and semiautomatic flaking, spray drying & powdering process. The semi- automatic batch type process is suitable for small scale sector.

PRODUCTS OF ONION

- **Onion powder** is a spice used for seasoning in cooking. It is made from finely ground dehydrated onions, mainly the pungent varieties of bulb onions, which causes the powder to have a very strong smell.

- **Freeze dried onion**

PRODUCTION OF GARLIC POWDER

1. Select matured garlic.
2. Weigh the garlic.
3. Remove outer coverings. Weigh.
4. Soak in 100 ppm chlorinated water for 10 minutes. Drain.
5. Peel the garlic.
6. Slice thinly the peeled garlic.
7. Lay in trays the sliced garlic.
8. Dry in a mechanical drier at $60\pm 5^{\circ}\text{C}$ until brittle.
9. Remove from the trays.
10. Cool at room temperature.
11. Grind into powder.
12. Pack in appropriate packaging materials.
13. Seal, label and store.

PRODUCTION OF DRIED GARLIC CHIPS

1. Select matured garlic.
2. Weigh the garlic.
3. Remove outer coverings. Weigh.
4. Soak in 100 ppm chlorinated water for 10 minutes. Drain.
5. Peel the garlic.
6. Slice thinly the peeled garlic.

7. Lay in trays the sliced garlic.
8. Dry in a mechanical drier at $60\pm 5^{\circ}\text{C}$ until brittle.
9. Remove from the trays.
10. Cool at room temperature.
11. Pack in appropriate packaging materials.
12. Seal, label and store.

[You can also produce Garlic Chips by frying (follow procedures 1-9, then fry until crispy, then follow procedures 10-12.)]

PRODUCTION OF ONION POWDER

1. Select matured onions, free from rots, damage or fungal infestations.
2. Weigh the onions.
3. Remove outer coverings thoroughly. Weigh.
4. Sanitize the onions in 100 ppm chlorinated water for 10 minutes. Drain.
5. Peel the onions.
6. Slice thinly the peeled onions.
7. Lay in trays the sliced onions.
8. Dry in a mechanical drier at $60\pm 5^{\circ}\text{C}$ until brittle.
9. Remove from the trays.
10. Cool at room temperature.
11. Grind the dried onions.
12. Pack in appropriate packaging materials.
13. Seal and label.
14. Store in a cool, dry storage room.