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1 **ASSISTANCE IN MAKING ORGANIC HERBICIDE GRASS POISON IN LEMBANG (VILLAGE) BUNTU TALLUNGLIPU, TALLUNGLIPU DISTRICT, NORTH TORAJA REGENCY**

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1 **Abstrak**

1 Budidaya tanaman hortikultura tidak terlepas dengan adanya rumput liar atau gulma. Nutrisi yang berada di sekitar tanaman budidaya akan diserap oleh gulma tersebut sehingga tanaman budidaya terganggu. Petani yang tidak membasmi gulma dapat mengalami gagal panen atau berkurangnya hasil panen. Gulma juga dapat merugikan petani atau perusahaan agribisnis dengan cara menurunkan kualitas produk pertanian. Tim pengabdian masyarakat membuat alternatif untuk membasmi gulma dengan membuat racun rumput Herbisida Organik. Metodenya dengan memanfaatkan bahan yang diperoleh dari sekitar lingkungan tempat tinggal petani. Hasil pengamatan racun rumput Herbisida Organik mampu mematikan gulma setelah ± 2 minggu didiamkan. Penggunaan racun rumput Herbisida Organik dapat menghemat biaya produktifitas pertanian.

2 **Kata kunci:** Gulma, Herbisida Organik, Agribisnis, Petani

Abstract

Horticultural crop cultivation is inseparable from the presence of weeds. Nutrients around cultivated plants will be absorbed by these weeds so that cultivated plants are disturbed. Farmers who do not eradicate weeds can experience crop failure or reduced yields. Weeds can also harm farmers or agribusiness companies by reducing the quality of agricultural products. The community service team made an alternative to eradicate weeds by making Organic Herbicide grass poison. The method utilizes materials obtained from around the environment where farmers live. The results of observations of Organic Herbicide grass poison were able to kill weeds after ± 2 weeks of standing. The use of Organic Herbicide grass poison can save agricultural productivity costs.

Keywords: Weeds, Organic Herbicides, Agribusiness, Farmers

INTRODUCTION

One of the factors that affect the growth and development of horticultural crops is the presence of weeds. Weeds are plants that interfere with or harm human interests, especially in the process of crop cultivation. Weeds are one of the important factors that can cause a decrease in crop production. The problems faced by farmer groups depart from the constraints of using organic herbicides sometimes not smooth or expensive, even though in the dead-end basin of Tallunglipu there is biological potential that can be used for making organic herbicides. Farmers, especially in the dead-end basin of Tallunglipu, have the existence to develop in the future. This is because organic farming culture has been done for a long time. Organic farming in Lembang Buntu Tallunglipu has been going well. The most widely produced organic products are rice, long beans, spinach, mustard, and chili.

Weeds are plants that are not desired by farmers because they can harm both directly and indirectly and can even result in crop failure. The main objective of organic farming systems is to produce food products that are safe for health and do not damage the environment. The results of the research have obtained people's perceptions of horticultural agriculture.

The problems faced by farmer groups depart from the constraints of using organic herbicides, which are sometimes not smooth or expensive, even though in Lembang Buntu Tallunglipu there is biological potential that can be used as material for making organic herbicides. Organic agricultural cultivation in Lembang buntu tallunglipu has been running well. The most widely produced organic products are rice, long beans, spinach, mustard greens, and chili in Lembang Buntu Tallunglipu, Tallunglipu sub-district, North Toraja district, the goals to be achieved include.

METHOD

This community service activity in the form of assistance to farmers study is an observational analytical cross-sectional study that employs an experimental counseling methodology. In this study, all

college students made up the population. The sample of this study consisted of subjects who came from populations that met the inclusion and exclusion criteria and had agreed to inform consent of the factors that affect the growth and development of horticultural crops is the presence of weeds. Weeds are plants that interfere with or harm human interests, especially in the process of crop cultivation. Weeds are one of the important factors that can cause a decrease in crop production. Weeds are plants that are not.

Weeds are plants that are not desired by farmers because they can harm both directly and indirectly and can even result in crop failure (Kilokada et al, 2015). The main objective of organic farming systems is to produce food products that are safe for health and do not damage the environment. The results of the research have obtained people's perceptions of horticultural agriculture.

The problems faced by farmer groups depart from the constraints of using organic herbicides, which are sometimes not smooth or expensive, even though in Lembang Buntu Tallunglipu there is biological potential that can be used as material for making organic herbicides. Farmers, especially in Lembang Buntu Tallunglipu, have the existence to develop in the future. This is because organic farming culture has long been practiced. Organic agricultural cultivation in Lembang Buntu Tallunglipu has been running well. The most widely produced organic products are rice, long beans, spinach, mustard greens, and chili in Lembang Buntu Tallunglipu, Tallunglipu sub-district, North Toraja district, the goals to be achieved include

RESULTS AND DISCUSSION

This Thematic Real Work Lecture activity was carried out in Lembang Buntu Tallunglipu, Tallunglipu district, North Toraja Regency. This activity was very welcomed by the community in Lembang Buntu Tallunglipu. One of them was a speech from the Head of Lembang together with staff at the Lembang Buntu Tallunglipu Office.

The results achieved in the Assistance in Making Organic Herbicide Grass Poison as a weed exterminator in Lembang Buntu Tallunglipu, Tallunglipu District, North Toraja Regency are as follows, namely: making grass poison, and application to agricultural land, training and manufacture of organic herbicide grass poison.

In this activity, training and mentoring were carried out to farmers directly in the process of making the Organic Herbicide Grass Poison, this training and mentoring was carried out by KKN-T UKI Toraja students (Figure 1). At the training making Organic Herbicide Grass Poison is given material about what tools and materials are used.



Figure 1: Training and assistance in making Organic Herbicide Grass poisons

Making Organic Herbicide Grass Poison is given material about what tools and materials are used and how to make them so that farmers can understand well.



Figure 2: Organic Herbicide grass poison yield and application to agricultural land

In making the poison, the tools used are quite easy to get by farmers, and the materials used are also easy to get by farmers, because the ingredients are obtained from around the environment where the farmer is located. In this activity, direct assistance was also carried out, namely farmers together with KKN-T UKI Toraja Students to practice making Organic Herbicide grass poison by knowing the dose needed in Organic Herbicide grass poison. The process of making grass poison This Organic Herbicide takes approximately 2 weeks which undergoes a fermentation process. Tools used in the manufacture of natural herbicides are as follows; fermentation containers (gallons / bottles of mineral water, rubber bands, tissue or cloth), buckets, stirrers, ph meters and TDZ). The ingredients used are diterngen, palm juice, sugar, vinegar staters and scobby.



Figure 3. Mixing Process of Making Organic Herbicide Grass Poison

Observations of Organic Herbicide Grass Poisons and Applications on Agricultural Land The process of making this Organic Herbicide grass poison which goes through a fermentation process for approximately 2 weeks, we can get Organic Herbicide grass poison that is ready to be applied on agricultural land. Physically we can see the poison of this Organic Herbicide grass is white.

The results of this observation were carried out after 7 days of spraying Organic Herbicide grass poison on agricultural land (Figure 3), observations were made by KKN-T UKI Toraja Students with the community. From our observations, the grass was sprayed using poison.

This Organic Herbicide grass has turned yellow and withered, seeing from the grass the grass is dead so the use of Organic Herbicide grass poison is quite effective if we use it.

The spraying results show that this Organic Herbicide grass poison is not inferior to chemical Herbicides. Grass sprayed using Organic Herbicide grass poison dries and dies so that its use is quite effective. There is a slight drawback in the use of this Organic Herbicide grass poison i.e. sprayed grass takes one week to die. This herbicide is a post-grow herbicide, because it is applied to kill weeds that have grown, along with cultivated plants (Budyanto, 2016).



Figure 3: Observation of grass poison Organic Herbicide

⁴ This spraying of Organic Herbicide Grass Poison is carried out after ± 2 weeks of fermentation so that the acetic acid contained in vinegar gives the power to kill weeds. The higher the acetic acid, the more deadly it is. The evaluation phase is part of the last stage of the work program. At this stage, KKN-T participants provide opportunities for other people to ask questions. Then KKN-T students will provide explanations according to community questions. This aims to determine the extent of

understanding and ability of the community while participating in the assistance of making grass poison from palm vinegar. At the end of the activity, KKN-T students and all participants did documentation

CONCLUSION

After carrying out Thematic Real Work Lecture (KKN-T) activities in Lembang Buntu Tallunglipu, Tallunglipu District, North Toraja Regency for more than one month. In the end, conclusions were drawn that can be used as a learning medium for readers and for the next Thematic Real Work Lecture (KKN-T) participants.

From the implementation of the Thematic Real Work Lecture (KKN-T) with the theme "Assistance in Making Organic Herbicide Grass Poison", farmers can make their own Organic Herbicide grass poison, whose ingredients are around the residence of Lembang Buntu Tallunglipu, Tallunglipu District, North Toraja Regency. Ingredients for the manufacture of Organic Herbicide grass poisons are easy to get and cheap. Organic Herbicide grass poison applied to agricultural land has proven to be quite effective. The final result of observation with Organic Herbicide grass poison can kill weeds on the 7th day after spraying.

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