

# Pack 115, Item

Type: Spots

2020

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**Radio spots on vegetable production \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Spot #1: Use clean seed**

Note to broadcaster

Vegetable production can be a lucrative business, but vegetables require careful attention and very specific knowledge and practices. This series of 14 radio spots covers some of the key practices that vegetable growers need to follow in order to be successful.

The spots were written with Ghanaian vegetable growers in mind. But most if not all of the spots should be immediately usable by vegetable growers across sub-Saharan Africa. Nevertheless, it’s worth checking into whether these practices should be modified for your own location by talking to extension agents, successful vegetable farmers, farmers’ groups, and other experts.

The spots vary in length from about 30-60 seconds and could be played multiple times during programs on crop production and at other times when farmers are listening, especially during important times in the vegetable production calendar.

The titles of the spots are intended only to identify the topic of the spot. They are not intended to be read aloud as part of the spot.

**NARRATOR:** Farmers! Clean seed means a better yield. Do you know the four qualities of clean seed?

First, it’s free from impurities.

 Second, clean seed is whole and unbroken.

 Third, clean seed is unwrinkled.

 And fourth, clean seed is free of pests and diseases.

 When you buy seed from shops, read the seed package. It will have a statement about the percentage purity of each seed.

**Spot #2: Can I use seeds from a previous harvest?**

**NARRATOR:** Farmers often want to know: Can I use the seeds from this year’s or last year’s harvest?

 The answer is yes. But only under certain conditions. Yes, it’s possible to use seeds from old stock but only if they are not F1 hybrid seeds.

 F1 hybrid seeds are bred to yield well the first season, but should not be planted after that.

 But remember, if you want to plant old seed stock, keep the seeds in a dry, dark, and cool environment, and make sure they’re clean and pest-free.

**Spot #3: Crop rotation**

**Farmer 1:** Hey, Kwesi, I made so much money last year from tomatoes that I’m going to grow them again this year.

**Farmer 2:** But I thought that we both had problems with nematodes.

**FARMER 1:** Yes, but what’s what pesticides are for, right? (laughing)

**FARMER 2:** Hmmm, growing the same crop the year after you had a big nematode problem doesn’t sound very smart. The problem could get worse the second year. There’s no way I’m going to plant tomatoes again.

**FARMER 1:** Why? Don’t you like making money? (LAUGHS)

**FARMER 2:** (Name of farmer), don’t you know that if you keep planting the same crop, the same pests and diseases will be in your field, but stronger every year? It’s as if the nematodes tell all their friends that there’s a big feast over in your field. Or they have more and more babies!

**FARMER 1:** You’re kidding, right?

**Farmer 2:** I’m serious. I’m rotating away from tomatoes to garlic. Rotating your crops means there’s less chance for pests like nematodes to multiply in the field. So if you want to make money this year, (name), stay up to date—rotate!

**Spot #4: Plant spacing**

**NARRATOR:** Farmers! If you want good yields, here are four things to remember about plant spacing:

First, if plants are sown too close together, they will be weaker and more susceptible to diseases and pests.

Second, crops that are well-spaced won’t compete for soil nutrients, so they’ll have better yields.

Third, good spacing allows better air circulation between plants. That reduces disease and pest problems.

And finally, for most vegetables, you should leave 25-50 cm between vegetable plants in a row and 100 cm between rows. The exact spacing depends on the vegetable, but make sure you have enough space to easily weed around the crops without damaging them—and check your spacing with other farmers and experts.

**Spot #5: Thinning seedlings**

**NARRATOR:** Vegetable farmers! How many of these four questions about thinning seedlings can you answer correctly?

First, WHAT is thinning seedlings? Answer: It’s removing some seedlings so that no seedlings are crowded.

Next, WHEN should I thin seedlings? Answer: Thin at sundown on a day when all seedlings have germinated well but are crowded, and at least three days before transplanting.

Third, HOW should I thin seedlings? Answer: Remove weaker or sickly seedlings very carefully, so you don’t damage the remaining plants. And make sure you remove thinned seedlings from the field so they don’t attract pests to the remaining seedlings.

And finally, WHY should I thin seedlings? Answer: If you don’t thin seedlings, or if you think them too late, the remaining plants are weaker and more susceptible to pest attack. Thin seedlings to get better yields.

How many did you get right?

**Spot #6: Weeding**

**NARRATOR:** Farmers! You know that every farmer removes weeds from the field. But have you ever stopped to ask why?

Here’s the answer: Farmers remove weeds because weeds compete with your crop for sunlight, nutrients, and water. If your crops don’t get enough sunlight, nutrients, and water, your yields will be poor and your plants will be weak.

 Also, some weeds can harbour pests which spread to the crop, like fruitworm in tomato.

 If you have a small plot, remove weeds by hand or with a hoe. Here are two things to remember: first, weeds must be removed BEFORE they flower. Second, if you manage weeds well before planting your crop, you will have fewer weed problems. After removing weeds, gather them together and burn them.

**Spot #7: Applying fertilizer**

**FARMER 1:** Hey, (name), I see you’re applying fertilizer. That stuff is expensive! Why do farmers need to use it?

**FARMER 2:** Because, (name), plants are just like humans and animals.

**FARMER 1:** (IRRITATED) Huh? What kind of an answer is that?

**FARMER 2:** Plants need nutrients for their daily activities just like humans and animals do. I use fertilizer because it gives my plants the nutrients they need, nutrients like nitrogen, potassium, phosphorus, and many others. The right kind and the right amount of fertilizer applied at the right time helps plants grow big, strong, and healthy.

**Spot #8: Top dressing**

**NARRATOR:** Farmers! Why should you top dress your plants? Because top-dressed fertilizer dissolves to reach plant roots, resulting in a healthy, uniform, and high quality crop.

Here are the six steps to effectively applying a top dressing:

First, create two holes for each plant with a dibbler.

Second, fill a cup with fertilizer.

Third, drop a cup full of fertilizer in each hole.

Fourth, cover the hole with soil, preferably with the dibbler.

Fifth, irrigate the field immediately after fertilizing.

Sixth, follow the recommended quantities for the type of fertilizer and the particular crop.

**Spot #9: Use the right type of nitrogen fertilizer**

**NARRATOR:** Farmers, are you using the right type of nitrogen fertilizer for your crop?

Did you know that there are two forms of nitrogen fertilizer: nitrate and ammonium?

Fruiting crops prefer *nitrate* forms of nitrogen. Non-fruiting crops do well with *ammonium*.

So farmers could fertilize tomatoes with calcium nitrate or potassium nitrate during the flowering and fruit stage. This will improve yield and quality. While nitrate fertilizers are more expensive, if you grow high-value crops, you can use them just at flowering time to give your crop a boost.

For non-fruiting crops like lettuce or cabbage, farmers can apply urea to promote growth of healthy leaves.

So remember! Nitrate for fruiting crops and ammonium for non-fruiting crops.

**Spot #10: What’s wrong with “See insect in field, spray insect with pesticide”?**

**FARMER 1:** Thanks for helping me out in the field today. I’m afraid my pest situation is out of control. I’ll take this row and you take that row and let’s look for insect pests on the undersides of the tomato plants.

**FARMER 2:** No problem. I’m glad to help. (PAUSE FOR TWO SECONDS) Oh, I see a couple of flies here. I’ll go get the knapsack sprayer. (SOUND OF STARTING TO WALK AWAY)

**FARMER 1:** Wait! How many insects did you see?

**FARMER 2:** Maybe three or four.

**FARMER 1:** (CHUCKLING) Oh, I see you’re a student of the “see insect, spray insect” school of pest management!

**FARMER 2:** Of course. You can’t just let pests eat your crop!

**FARMER 1:** Let’s look at those insects a little more closely. (PAUSE FOR TWO SECONDS) Right, just as I thought. These insects here actually EAT pests like whiteflies and aphids. So my pest problems would get worse if we killed them.

**FARMER 2:** What??

**FARMER 1:** That’s right. When it comes to insects, there are good guys and bad guys. We only want to kill the bad guys. And only if there’s too many of them! Otherwise, we might spend more money spraying pesticides than we save by killing pests.

**FARMER 2:** (SLOWLY) Hmmm, sounds like I have a lot to learn.

**Spot #11: What is IPM?**

**NARRATOR:** What is IPM?

 IPM stands for Integrated Pest Management. It’s a way of managing pests that reduces pesticide use and uses many different ways of managing pests and diseases. IPM understands pests to include insects, nematodes, rodents and other mammals, disease organisms such as fungi, weeds, and other organisms which can harm crops.

 IPM uses not only chemical pesticides, but also cultural practices like late or early planting and crop rotation.

 It also uses crop varieties that are resistant or tolerant to pests and diseases. And physical methods to manage pests and diseases, like surrounding vegetable seedlings with cardboard and aluminum collars so cutworms can’t get at them. And biological methods like planting a strip of flowering plants that attract insects which eat pests. It also uses biopesticides that might contain beneficial microorganisms or plant-based materials that kill or repel pests.

 By using a combination of all these methods, IPM can more effectively manage pests *and* reduce your use of pesticides.

**Spot 12 Harvesting**

**NARRATOR:** Vegetable farmers! Harvesting must be done correctly! Here are four important things to remember:

 First, vegetables are highly perishable. So, before you harvest, prepare everything you will need well in advance.

 Second, harvest in the early morning or the late evening to avoid the heat of the day.

 Third, identify that there’s market demand for your vegetables before your harvest them.

 Finally, it’s important to cool harvested vegetables as soon as possible. So, whenever possible, have a cold room ready to store your harvested vegetables.

**Spot 13 Cover your nitrogen fertilizer after applying**

**NARRATOR:** Vegetable farmers: did you know that nitrogen fertilizers can lose their strength unless you cover them after applying?

It’s true! Nitrogen fertilizers, and especially urea, can lose their strength when nitrogen is lost to the air as a gas. This is most likely to happen during the first few weeks after applying it.

But if you add nitrogen fertilizer to the planting hole and immediately cover with soil, much less nitrogen escapes into the air. And that means your fertilizer will be strong enough to keep your crops healthy and high-yielding.

Here’s another useful tip: Apply your nitrogen fertilizer when significant rainfall is predicted, or when you can use irrigation or tillage to incorporate the fertilizer into the soil.

**Spot 14 Re-entry intervals and pre-harvest intervals**

**Narrator:** Attention farmers! Here are TWO important numbers you need to pay attention to on pesticide labels:

The first is the *re-entry interval*. This is the number of days you must wait after spraying before going into the field again. If you enter the field too soon, you may expose yourself to harmful chemicals.

The second is the *pre-harvest interval*. This is the number of days you must wait before harvesting food from a sprayed area. If you or someone you sell to consumes the food too soon, it may still contain toxic chemicals.

Remember the *re-entry interval* and the *pre-harvest interval*. And never spray any pesticides without first reading and understanding the label!

## Acknowledgements

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