

Marginal rate of yield: what is the effect of different farming practices?

During the 2016 production season, experiments were set up to analyse the marginal rate of yield and marginal rate of return of sesame production practices. The experiments were conducted in a total of 40 plots (20 in Amhara and 20 in Tigray region) with the objective of identifying the crucial activities of the 20 Steps sesame production technologies, the costs incurred for different treatments and the additional yield and revenues they generate.

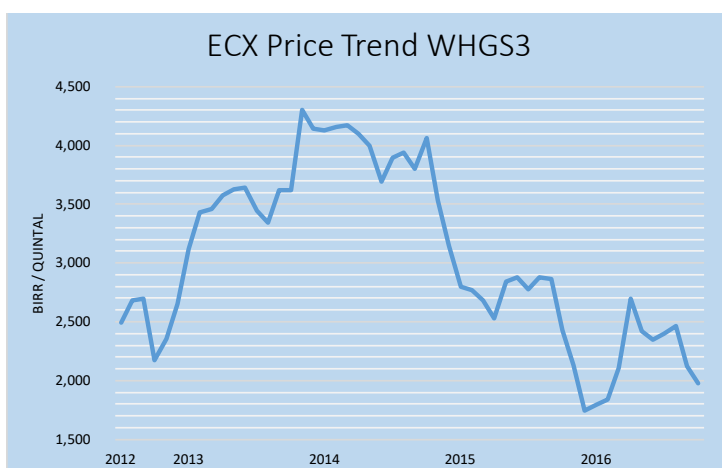


The activities have been conducted in research sites, farmer training centres (FTCs) and farmers' fields. In each experiment site, 16 treatment combinations have been used. The treatment combinations are first the 20 Steps full package, then the full package minus one or two of the activities. For example, full package minus row planting, pest control, fertiliser, thinning, row planting and thinning etc.

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Sesame market price slumps

Commonly, when the production season is over, sesame farmers tend to flock to spot markets with their loaded donkeys, carts or big trucks. These are often the happiest moments for farmers as their three months of hard work will be translated into money, and hopefully profit. This year, however, the trend does not seem to be as before in spot markets around Metema. In the last week of October and first week of November, very few farmers showed up to sell their sesame at Kokit, Selferedi and Dubaba spot markets. Due to this, traders in these spot markets are spending their time either chatting with fellow traders or sitting idle and



The graph shows the ECX sesame market trend for Whitis Humera Gondar type, from 2012 to 2016.

gazing at the spot market gates, yearning to see farmers coming with their loaded sesame produce. In order not to get bored, some are playing cards sitting under the shadows of the trees and stores.

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About this newsletter

The purpose of the SBN newsletter is to provide relevant and timely information on the Sesame Business Network and its support project-Benefit - SBN.

In this issue we highlight the major activities that have been taken place between July and October 2016.

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Currently the sesame market price drops. The price for the new produce started way below the expectation of farmers and traders. Spot market traders seem to be bewildered and confused by this situation. They said sesame marketing at present is discouraging both for farmers and traders.

Mr. Amare Kenaw, one of the traders in Kokit spot market, is not happy with the current sesame marketing price.

He said he started to buy this year's produce in the last week of October with 1,850 birr and



immediately he has learnt that the price in Addis Ababa ECX market was 1,800 birr per quintal for the second grade. Due to this he is buying at a lower price but farmers rarely showed up to his shop. The reason for the poor market interaction, he said: "in Kokit, productivity of sesame is relatively

limited this year. Because of last year's poor market most farmers did not produce sesame. Also, those who produce did not have a good harvest because there was too much rain in the area." Mr. Amare said: "we are buying a quintal of sesame with 1,700 birr. I try to make sure that the quality of the produce that I buy is very good. But I am not sure what grade this sesame will have when it reaches to the ECX. They usually give low grades. Even if it will be graded as I expect, with the current reality, I won't get profit out of it. For instance, the price for the 2nd grade is 1,900 birr right now. I have an expense of more than 200 birr. Before I take the produce that I buy to the ECX market, I have to change the sack. I have to mix the sesame to make it similar. I pay for the sack and the labour cost. I will pay for loading and unloading. I pay tax. Considering these costs, at present I am not making profit from the sesame business."

Mr. Azmeraw Abawa, an investor farmer and trader in Shinfa, feels the same as Mr. Amare. Mr. Azmeraw started to buy this year's produce mid-October. "We are buying at 1,500 to 1,700 birr per

quintal. Compared to the price before, this is very low. The grading system at ECX is not encouraging. It is not straightforward. It is very subjective; sometimes they give lower grades for the quality sesame that we think will be graded well; in some cases, they say the sesame is attacked by insects and they make us take all the sesame back. What is more, once we take the sesame to the ECX warehouse, we have only 30 days to sell. Sometimes we want to wait for a better selling moment. Both farmers and traders are not benefiting this time."



Despite experiencing a very rough time, spot market traders are hopeful that things will improve in the future. Both Mr. Amare and Mr. Asmeraw do not seem to opt out from the spot market trade. That is why they are opening their shops every day and waiting for farmers to sell their season's produce.

Representatives of financial institutions and farmers discuss sesame financing challenges in the field

A sesame field visit was organised for bankers and representatives of microfinance institutions and kebele loan committees at Sanja on 24th of October 2016. The field day brought together about 70 participants convened from North Gondar branches of the Commercial Bank of Ethiopia (CBE), the Cooperative Bank of Oromia (CBO), Amhara Credit and Saving Institution (ACSI), Tach Armachiho *woreda* Office of Agriculture, *woreda* administration, Selam union and farmers cooperatives.

Participants visited a mature sesame field at Sanja farmer training centre (FTC), in which different trials were conducted. The field visit and the discussions made after the visit helped representatives of financial organisations to be aware of the different costs that farmers incur when they are using conventional and improved production technologies. It also gave them chance to learn the farmers' finance and credit needs for sesame production.

During the discussion, Mr. Ligabaw Hailu, a small-scale farmer from Sanja kebele, witnessed that he and his fellow farmers are convinced that employing improved agricultural practices will increase production and their income. He, however, mentioned: "land renting, rent for oxen, fertiliser application, use of quality seed, land preparation, labour and other steps in the sesame production require much money. Most of us wanted to use fertiliser but we did not because of a lack of credit. We get some credit from ACSI

but the credit will be finished before the weeding starts."

Representatives of the financial institutions put forward the major challenges related to financing sesame production and discussed these with the other participants. Among the points raised and discussed are: banks do not have a special sesame credit product for individual farmers; financial institutions insufficiently know the costs and cash flow of sesame production; ACSI's timing of credit provision to small scale-farmers; poor farmers' saving culture; limited reach of financial organisations; unions late loan request to the banks and not returning their loans on time etc. It was also mentioned that some investor farmers take bank loans for investing it into their land but they rent their land and use the money for other purposes.

Participants appreciated the field visit and the discussion session. Representatives of the financial institutions said that the event not only helped them develop their awareness on the sesame production steps and related costs but it also made them better understand the farmers' credit needs. Based on this understanding and increased empathy for farmers' problems, they promised to do their level best to search for appropriate solutions. Participants concluded that farmers, ACSI and banks need to go hand-in-hand to address the challenges and support each other in their respective contribution to improved production and productivity of sesame and rotation crops.

Financial literacy training progressing well

This year, around 1000 sesame farmers in Northwest Ethiopia are recording their production costs; more and more farmers are interested to learn about cost recording so that they can calculate their production costs and do cost benefit analysis.

Farmers' Cooperative Unions in Northwest Ethiopia are rolling out financial literacy training sessions for a targeted 1,040 farmers. Selected farmers of 52 cooperatives have been trained as trainers in June 2016. In July, they went back to their cooperatives to train and organise peer-to-peer discussion sessions for 20 cooperative members. In Western Tigray, 27 farmers- trainers have provided training for 540 members in 27 different kebeles. In North Gondar, the 25 trainers cascaded the training to 500 farmers.

After the training sessions in July, so-called 'peer-to-peer sessions' were organised. So far, these sessions have been held four or five times. They will continue to organise similar sessions until the end of the marketing season. Unions are actively supporting and monitoring the cost recording in 'economic logbooks' by providing technical support and facilitating budgets.



Mr. Hadish Gebrehiwot is one of the founding and board members of Miebale Multi-purpose cooperative. He is participating in the cost recording training given to his fellow cooperative members. He said: "the training is very informative and the materials we received for cost recording are easy to use. Right after I have taken the training, I started recording all the costs that I spend for different activities such as land preparation, sowing, and weeding etc. I will continue doing this for the whole season." Currently, Mr. Hadish is waiting to collect his harvest and sell his sesame. As a board member, he plans to motivate and encourage other farmers to record all their costs in the future.



ToT workshop at Humera

Mr. Aderajew Bayew, from Awlala kebele, Metema *woreda*, has been providing training for 20 farmers and arranging peer-to-peer discussions after he got back from the Training of Trainers (ToT) session he participated in. He said that all the 20 farmers that he has trained attended with full attention and active participation. "Other farmers who are not included in the training are complaining for not being included. They asked me to provide them the form so that they can record by their own. I supported some interested farmers to record their cost on blank sheets of paper. There was even a farmer who came and attended the training without being selected."

Mr. Aderajew observes that the training session helped farmers to get to know each other better and create stronger intimacy and friendship. He goes on to say that trainees are well aware of the importance of cost recording that is why they follow everything strictly.



In some places, such as Awlala, farmers spouses have been supporting their husbands in recording production costs. In this way, the whole household

becomes involved in the family farm business.

The financial literacy training is helping farmers to register their costs and calculate their cost benefit analysis. This will help them make well-informed production decisions. For 2017 it is targeted to reach 10,000 farmers. Attention will be given to: coaching by cooperatives, farm management perspective (husband and wife involvement), linkage and involvement of banks and microfinance institutions, promotion of farmers' saving culture and internal resource mobilisation of cooperatives.

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In Western Tigray, 17 out of the 20 experiment sites are successfully running. In North Gondar, 11 of the 18 sites are going well. Active follow up and monitoring have been done for the treatments in Western Tigray. This was not possible in North Gondar due to the security problems during the production season. In both zones, excess rainfall and/or water logging, land dispute and shortage of labour and expertise affected some of the experiment sites.

The treatments, shown to farmers during field days, helped farmers learn from the differences. The analysis will allow for information on the marginal contribution of certain practices to the yields observed. Photo sequences of the fields with different treatments will be used for training and communication.

Health benefits of soy bean

In this column, we have been sharing with you important information on sesame cuisine and research findings on the important health benefits of sesame. This time, we ask your attention for one of the rotation crops in sesame farming systems: soy bean, a rotational crop that Benefit- SBN promotes not only for its nutritional value for farmers but also for its marketing.

Soy bean is hailed as the most protective bean, which has important health benefits. It is rich in protein, beneficial fat, fiber, iron, calcium and other nutrients.

Protein. Soy bean is the richest plant source of protein. It contains 26 percent protein. Soy protein is also of the highest quality amongst all legumes. The quality of soy protein is equal to that of meat and milk proteins. Most plant proteins are considered "incomplete" proteins because they are low in one or more essential amino acids. The level of amino acids in soy beans is higher than in other beans, and therefore soy protein is equivalent to animal protein in quality.

Fat. Like protein, soy beans are high in fat too. Most legumes (except peanuts) contain between 2 to 14 percent fat, whereas soy bean contains 31 percent fat. At the same time, most of the fat in soy beans is unsaturated and beneficial. The presence of omega-3 fats makes it special as soy beans are one of the very few plant sources of this essential fatty acid. This acid forms an essential nutrient which helps reduce the risk of both heart disease and cancer.

Fiber. A serving of soy beans provides approximately eight grams of dietary fiber. However, some soy foods are processed in ways that decrease the fiber content significantly. Tofu (cheese-like food made of curdled soy bean milk) and soy milk contain very little fiber, while soy foods that utilize the whole bean such as tempeh, soy flour and textured soy protein are high in fiber.

Iron. Soy is rich in iron too. However, soy protein reduces iron absorption which leads to the iron in soy-based food products being poorly absorbed. Iron could be better absorbed from fermented soy products like tempeh and miso (a thick paste made from fermented soybeans).

Calcium. Soy foods are a good source of calcium in comparison to the commonly used legumes. Processing however affects the calcium content of soy foods considerably. Tofu due to its processing methods can contain between 120 and 750 mg of calcium per 1/2 cup serving. Soy milk contains around 93 mg of calcium per one cup serving. The calcium-fortified soy milk could often contain between 200 and 300 mg of calcium per serving and a good amount of vitamin D.

Other nutrients. Like other whole grains, soy foods are rich in B-vitamins. Soy milk is well fortified with vitamin B12 which makes it a prominent source of this essential nutrient.



Soy bean in comparison to other legumes is far superior in terms of health benefits.

- Low in fat with no cholesterol
- Contains essential heart friendly fats
- An excellent source of fiber
- Is a good source of enriched calcium and vitamin B12
- Is a complete protein, containing all the amino acids essential to human nutrition
- Provides important minerals such as calcium, magnesium, iron and selenium
- Rich in a beneficial bacterium especially in fermented products, such as miso, tempeh, and soy yogurt
- Contains an important substance which are beneficial in reducing risk of various cancers, heart disease and abnormal losses of bony tissues
- Whole soy foods such as tofu and tempeh form a nutrient rich alternative to meat
- Soy beans can be processed into various soy products namely soy flour, soy milk, cottage cheese like tofu, fermented products like tempeh and miso.



Soy-based food products

Source: <http://www.medindia.net/patients/lifestyleandwellness/health-benefits-of-soybean.htm>

Sesame farmers field days

In 2016 production season, *woreda* offices of agriculture, GARC and HuARC organised more than 200 sesame field days for thousands of farmers and other stakeholders of the SBN. The objective of the field days were to show farmers the performance of improved sesame and rotation crops at the different growing stage of the sesame. In the field days held at FTCs and model farmers' places, participants were able to compare and contrast the improved and conventional methods of production. The field days were organised at kebele, *woreda* and zone/regional levels.



Field day participants, visiting sesame research activities at HuARC

Regional level field day

The field day organised by HuARC in collaboration with Benefit-SBN brought together over 300 individuals from farmers' cooperatives, unions, research, offices of agriculture, administration and other SBN stakeholders from Western Tigray zone on the 5th of October 2016. The objective of the field day was to show farmers and other participants of the field day the research activities conducted to solve the major challenges of production and productivity of sesame and rotation crops in the area.

Led by Dr. Abadi Girmay, natural resource management directorate director at Tigray Agricultural Research Institute (TARI), Dr. Geremew Terefe Benefit-SBN project manager and HuARC researchers; participants visited the research activities on sesame, rotation crops such as sorghum, mung bean, soybean and others and on animal feed at HuARCs compound. Next, they visited an investor farmer's farm at Bereket where improved production technologies of sesame and mung bean were demonstrated; and other activities of the investor farmer such as water harvesting, onion production and mango trees planted. They also visited a model farmers plot and a farmer training centre under which the 20 Steps improved sesame production technologies have been employed.

The field days gave chance to farmers and other stakeholders to evaluate the different improved production technologies and allowed for

exchanging ideas and information with researchers and officials from agriculture offices and research centers.

Model farmer Mirhet Teame expressed her satisfaction about the field visits. She said: "I am extremely happy on what I have seen today. I believe that the research activities that I have visited will help change the farmers' lives in the future."



The young farmer Kasay Dangew is one of the visitors from Adijamus, Wolkalet *woreda*. He said: "it is my first time to participate in such a field day. I have really got an important lesson. It helped me compare my practice with other farmers. I have especially seen the importance of row planting. I myself employed row planting but I am very much impressed on the sesame and sorghum fields that I have seen today. They are really different."



Finally, discussions were held on issues related to weather forecasting, pest management/striga management, fertiliser application, crop diversification for sustainable

marketing, irrigation and mechanisation with Dr. Eyasu Abrha, director general of TARI and Dr. Geremew Terefe, manager of Benefit-SBN.

Field day on rotation crops

More than 70 farmers, staff members of primary cooperatives and unions, experts from *woreda* office of agriculture visited the soya bean and sorghum fields planted as rotation crops for sesame at Addis Alem kebele, Tegede *woreda* on the 10th of September 2016. The field day was organised by Tegede *woreda* office of agriculture in collaboration with Selam union, IFDC/2SCALE and Benefit-SBN. The objective of the field day was to help farmers share experiences from one another and see the performance of the selected rotation crops, e.g. Deber, a local sorghum variety and soya bean.

Farmers appreciated not only the efforts made in scaling out rotation crops for sesame but also the market linkages created for Deber sorghum variety. They however, expressed their concern on the market for other rotation crops. Most farmers do not know how they can consume the soya bean at their home and they are not able to consume all their produce. They said they will cultivate soya bean next year, only if this year's produce can be sold.

For the scaling-out of rotation crops, 2SCALE and Benefit-SBN produced and disseminated sorghum production manual; cascaded training has been delivered to experts and farmers. 1036 selected farmers planted soya bean and 502 farmers planted sorghum in the SBN *woredas* in North Gondar zone.

Assara: camel-driven sesame oil extraction

In Northwest Ethiopia, though limited, some individuals extract sesame oil using a very traditional method. Whether this business is profitable or not is a question worth asking and answering. In this issue of our newsletter we would like to share with you some facts about the *Assara* traditional method of oil extraction from a quick survey done by Benefit-SBN.

Assara is a camel driven method of traditional sesame oil extraction (see the picture). Oil is extracted by adding the seeds into a wood mortar and pouring water into it after the seeds are slightly crushed. The key resources used in the process are camel, at least one person and the wooden mortar and its accessories. The daily feed cost of a camel is reported to be 30-50 birr; e.g. around 15,000 birr per year. The price of one camel ranges from 13,000- 15,000 birr. The camel pulling the wood and stones for the *Assara* is hardly used for other purposes.

The principal raw materials used for oil extraction are black and white sesame seeds that are below standard to be traded through Ethiopian Commodity Exchange. The seeds are sun-dried. Dust and other light foreign matters are removed by winnowing before crushing. After slightly crushing the seeds, cold or warm water is poured into the seeds little-by-little to avoid burned taste of oil and realise maximum possible yield. Warm water is preferred for optimal oil extraction. After crushing, the oil floats to the surface from where it is taken with a small cup.

The local operators provide two kinds of services. The first is that they extract oil and sell it to some people. The key customers for the local oil extractors are health concerned people living in Gondar, Bahir Dar, Mekelle and Addis Ababa. The second one is oil extraction service that they commonly do for the local people. For this service, they charge about 300 birr/quintal and they take the cake which is sold for about 300 birr (5 birr for one kg). This makes the total revenue of the operator 600 birr/quintal.

The amount of sesame seed used for one crushing session ranges from 20 to 33 kgs. Crushing 33 kgs of seeds



A local entrepreneur at Gendewuha while pressing sesame oil

takes up to 4 hours. The time required for first-round extraction is ½-1 hour higher than subsequent rounds. The wood mortar gets warmer after the first-round extraction and makes the process more efficient. It takes 8 to 11 hours to crush 1 quintal of sesame seeds.

Reportedly, the output obtained from one quintal of sesame is 40 litres of oil and 60 kilos of cake. In reality, the oil production is however only 30 litres from 100 kgs of sesame seed, as 750 ml bottles are often used for measuring the oil and these are considered by many of the sellers as one litre. Given that Humera and Gondar sesame varieties contain 48-53% of oil, this method of oil extraction is far below the potentially possible oil yield. By using good quality small-scale oil extraction machine, it is possible to get 40-45 litres which is 33-50% higher than is now realised using *Assara*.

After extraction of oil, it is used for cooking as well as for medicinal purposes, such as treatment of wounds, ulcers and burns. It is also used for treatment of wounds of animals. The cake is used locally for cattle feed. The oil was sold for 60-70 birr per 750 ml bottle and the price of cake was 500 birr per quintal. When the survey is done, the price of sesame seed at the primary markets was 2,100 birr/quintal.

Generally, although *Assara* is helping individual processors in particular and the community at large to get healthy sesame oil, the work is laborious and time-consuming. It is only suitable for processing small quantities of seeds. It is less efficient than small-scale oil extraction machine. Therefore, there is high potential for farmers' organisations and small-business owners to operate more efficient and viable small-scale sesame oil extraction machines.

EPOSPEA Conference held

On the 16th and 17th of November, 2016, the Ethiopian Pulses, Oilseeds and Spices Processors and Exporters Association (EPOSPEA) held its 6th annual conference in Addis Ababa. Participants from 20 different nations joined the two-day session to listen to presentations and discuss about production and marketing of pulses, spices and sesame.

For sesame farmers, the market prices have been quite discouraging for some time now. At spot markets, sesame is

sold for less than 2,000 birr/quintal, which is because of the international market. At the conference, speakers mentioned that the price is expected to remain at current levels. The low prices from other African countries were said to happen because of depreciating currencies and a strong need for foreign currencies in other African countries. It was said that the price may raise after a month or two but it is not expected that it will fetch very high prices soon.

Practical skills for sesame pest and disease management

Gondar Agricultural Research Centre (GARC) in collaboration with *woreda* offices of agriculture and Benefit-SBN trained over 160 agricultural experts, development agents, staffs from farmers' cooperatives and private input suppliers on sesame pest and disease management on 30th of August and 1st of September 2016 at GARC's research sites in Metema and Sanja. The objectives of the training were to help farmers identify most common sesame weeds, insects and diseases and to create awareness on different pest and disease management options; on the most common chemicals used for pest and disease control and on calibration and safety issues in applying chemicals.

The training helped farmers to identify most common sesame weed types in North Gondar sesame producing areas. They also identify local and scientific names of weed type and types of most common sesame insects. Furthermore, they were trained on the damage level and management options of different



weeds and pests. Participants were made to carefully look into the sesame plants and collect web worm and aphid insect types from the demo plots by themselves. In the end, the practical use of knapsack sprayer and safety measures during chemical application were demonstrated to participants.

Training participants' feedback

Participants gave positive feedback on the training. Mr. Alene Mengistu is a private input dealer at Tegede

woreda. "This is the first time for me to participate in such kind of training. It is helpful, as so far I was simply selling chemicals to farmers, without knowing exactly how different pests and diseases look like. This training will help me to give advices to farmers on how to use chemicals while selling. Though it was short, it was very helpful for individuals like me" said Mr. Alene.

Mr. Asnake Eseyehun is a staff member of Selferdi multi-purpose farmers' cooperative. The cooperative provides chemicals to farmers at a fair price, but they do not give advice to farmers on how to use the chemicals. They have very limited knowledge on the rate, application time and method of recommended chemicals. Mr. Asnake said: "This practical training is crucial for us. Though the period is limited, we have seen different pests and disease of sesame; we have learnt about chemical application. We will pass this knowledge to our member farmers."

Mealybug: A potential devastating pest of sesame in Northwest Ethiopia

Webworm, gall midge and trips are the most prevalent sesame pests in Northwest Ethiopia. This year, another insect pest known as cotton mealybug (*Phenacoccus solenopsis*) has been observed on sesame in Mirab Armachiho, Tegede, Tsegede, Kafta Humera and Wolkaiet *woredas*. Because of its potentially devastating effect on sesame, we alert our readers on the potential mealybug damage, and inform about the peculiarities, way of spreading and management of this insect pest.

Damage. The insect can attack all parts of almost all plant species (ornamental plants, fruit crops, vegetables and field crops), preferably those with broadleaves. Plants infested during seedling phase show crinkled or twisted leaves. Stunted plants dry completely when infestation is severe. Late season infestations during the reproductive crop stage result in reduced plant vigour and early crop maturity causing poor grain filling with greatly reduced yield. Mealybug can thus cause severe economic damage to a wide range of crops and pose a serious threat to agricultural production and farmers' income.

Peculiarities. Mealybugs possess a waxy coating on the dorsal side that protects it from insecticides and natural mortality factors. They have a high reproductive rate, the ability to hide in the soil cracks and crevices for long periods; and the propensity to spread through seeds, wind, water, rain splash, birds, human beings and farm animals. The two black spots on the thorax and six black



spots on the abdomen are major features used for cotton mealybug identification (see figure, below left).

Spread. Humans spread mealybugs during weeding, scouting, spraying and harvesting. Animals disseminate when moving through infested areas to healthy fields; wind, rain splash and flood also contribute significantly to mealybugs spread.

Management. To manage mealybug early detection and destruction of infested plants or parts by collecting in plastic bags and taken far away from fields to be destroyed by burning or dipping in burned engine oil; avoiding physical contact with the infested plants; if at least one stem completely colonised with mealybugs in more than 50 randomly sampled plants per hectare, chemical control measures may be initiated using closer (sulfoxaflor) 240 SC at the rate of 150 ml per hectare; Dimethoate 40% SL at the rate of 2 litre per hectare; Pritacet (Acetamiprid) 10% EC at the rate of 2 litre per hectare. Start applying pesticide near the root zone; at the base and then progress to upper infested parts.



Row planter news

Practicing row planting, one of the most important activities in the 20 Steps sesame production, remains a challenge in the sesame production zone. The adoption rate of row planting is still limited because of scant availability and accessibility of sesame row planters. In 2016 production season, Gondar and Humera Agricultural Research Centres in collaboration with local private companies, Rhea Composites (Dutch company) and Benefit-SBN tried to address this challenge by demonstrating and evaluating tractor-pulled row planters.

From the evaluation of different row planters, the Ultimate Motors Sfoggia row planter has been found very promising and caught in some investor farmers eyes. Therefore, this production season the Sfoggia row planter was used to plant the sesame in the demonstration plots of the 20 Steps conducted in Humera Agricultural Research Centre (HuARC) and four investors farmers' plots at Marezeneb (Tegede), Koredem (Mirab Armachiho) and Delelo (Metema). The row-planted sesame plots were shown to farmers at different stages of the sesame growing season. Visitors appreciated the stand of the sesame at the maturity stage. Being impressed by what he has seen, Ato Sahl, an investor farmer at Delelo area said: "I saw such type of sesame field long ago when I was planting sesame on a virgin land" said.

The small row planter developed by Rhea Composites was further tested and improved this year and donated to HuARC. This small row planter has shown a very good progress. It will further be developed and tested under irrigation and rain fed conditions at HuARC. Next season, the two row planters will further be popularised.



Above Sfoggia row planter while planting; below small row planter developed by Rhea Composites under test

Upcoming activities

- * Analysis of the 2016 production season rolling-out activity
- * Data collection and analysis of marginal rate of yield and return trials
- * Data collection and analysis of economic logbook recordings
- * Organising regional workshops at Gondar and Humera
- * Detailed planning of the 2017 activities
- * Availing market price information to selected markets
- * Organising national sesame platform

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More information about the SBN and its support project can also be found on the SBN website: <http://www.sbnethiopia.org>

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