



Plant Protection Directorate

Fall Army status in Ethiopia

July 14-15, 2017

Addis Ababa, Ethiopia



**Plant Protection
Directorate**



Back Ground

- **Fall army worm *Spodoptera frugiperda* is native to tropical and subtropical regions of the Americas.**
- **In 2016 it was reported for the first time from the African continent, in Nigeria, Sao Tomé, Benin and Togo (IITA, 2016; IPPC, 2016).).**



**Plant Protection
Directorate**



Back Ground

- It confirmed in Ghana (CABI, 2017), Zimbabwe (FAO, 2017), Swaziland (IPPC, 2017), Kenya (Republic of Kenya Ministry of Agriculture, Livestock and Fisheries, 2017), Zambia (IPPC, 2017d) and Congo Democratic Republic (IPAPEL-FAO, 2017),
- preliminary reports of the pest in Malawi, Mozambique, Namibia and South Africa (BBC, 2017).



**Plant Protection
Directorate**



Back Ground

- End of February, 2017 Fall armyworm intercepted and reported in Southwest Ethiopia.
- Immediately in 1st week of March, 2017 based on the report from Mizan Plant Health Clinic team of experts from MoANRS and EIAR travelled to the places and confirmed.



Plant Protection
Directorate



Preparation before the occurrence of FAW in Ethiopia

- **Review literature (Identification & Management of the pest)**
- **Personal communication with Senior professionals**
- **Web sites**
- **Email communication with colleagues from Tanzania and Kenya**
- **Prepare emergency plan to the MoANRs**
- **Inventory of sprayers and related equipment**
- **TOT & Information transfer to Regions**
- **Establish Technical team from stalk holders**



**Plant Protection
Directorate**



Different stage of larvae late Feb. 2017



Plant Protection
Directorate



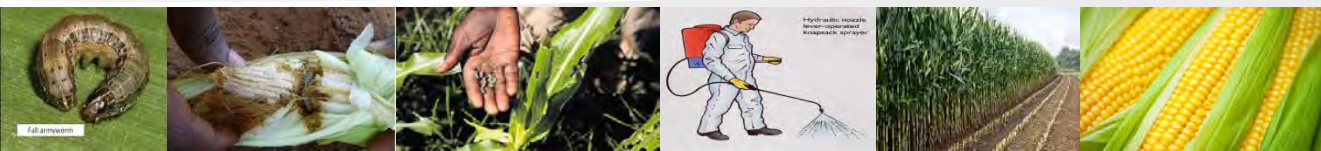
Field survey and technical support



Plant Protection
Directorate



Farmers awareness at Farm level



Plant Protection
Directorate



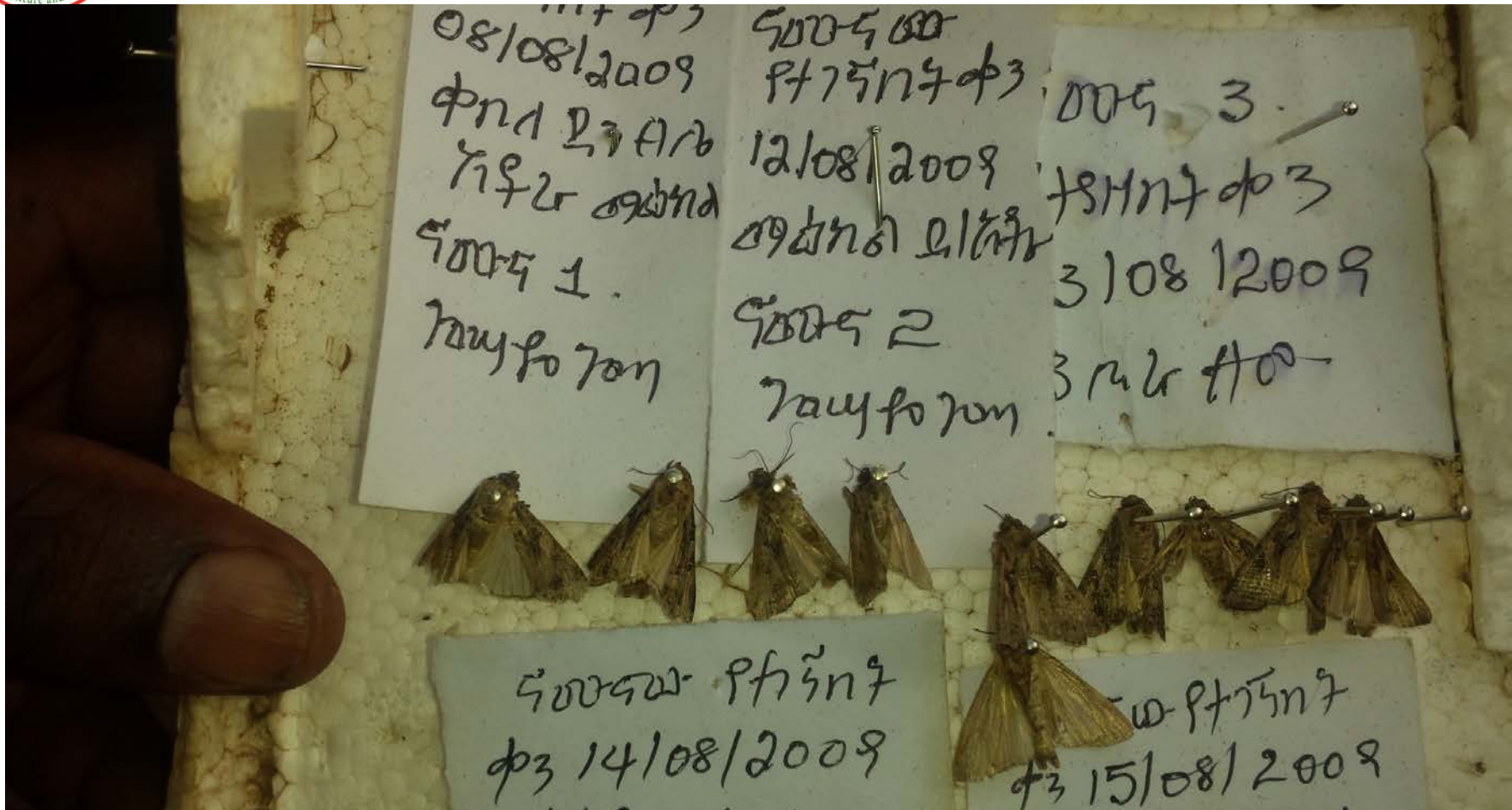
Farmers Awareness Tassel Damage



Plant Protection
Directorate



Moths of Fall Army worm collected from African army worm Traps in Gamo Gofa Zone



Plant Protection
Directorate



Larvae collected by Hand picking and killed



Plant Protection
Directorate



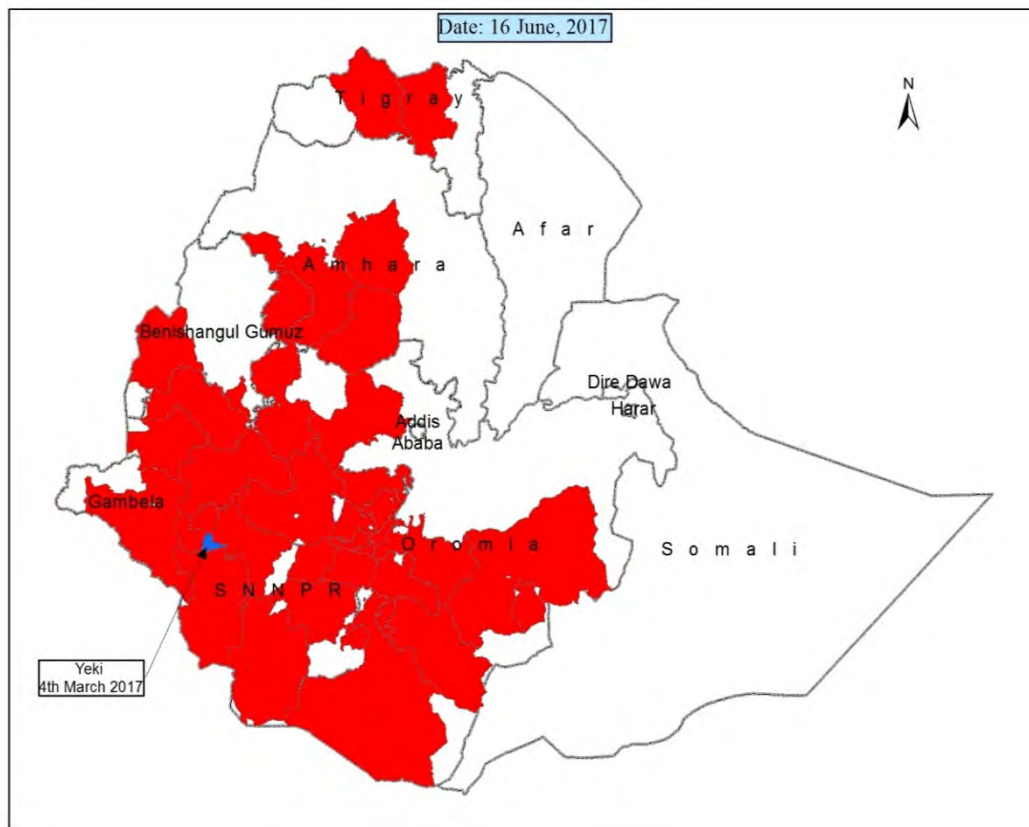
Tassel damage 3rd generation



Plant Protection
Directorate



Fall Armyworm Distribution in Ethiopia



Current status:

- 6 Regions
- 49 zones
- 385 woredas (district)
- 5,859 villages
- Close to 2,35,030 Ha planted area
- infested (19 % of M. Ha)
455081ha



Plant Protection
Directorate



Area infested and control

R.No	No of Zones	No of Districts	No of Villages	Total area planted	Area infested	Control by chemical	Control hand picking	Total area	Amount pesticide (lt)
South	16	121	2,161	488,093.58	92,194.48	41,804.61	39,537.93	81,342.53	49,950.81
Oromia	18	166	2,414	951,949	225,327	72,961.7	76,475.51	149,437	65,111.25
Amhara	6	54	699	547,939.1	98,480.72	28,422	62,307	90,729	19,419.2
Tigray	3	16	107	81,768.8	1,718.85	356.875	1,258.25	1,615.12	296.625
Benshangul	3	20	399	296,257.04	32,840.18	2,096.525	12,830.85	14,927.372	2,430.5
Gambella	3	8	79	9,022.6	4,520	3,134	-	3,134	6,068
Total	49	385	5,859	2,375,030.12	455,081.23	148,775.6	192,409.5	341,185.	143,276.
					19%	32.69%	42.28	74.97%	



**Plant Protection
Directorate**



MoANRs efforts to control the insect

- **2-3 Million USD (45,000,000 ETB) allocated by MoANRS**
- **ToT of experts immediately after inception of this pest**
- **Establishment of technical committee**
- **More than 150,000 lts pesticides dispatched to regions**
- **Leaflet and survey protocol prepared**
- **PPD experts in collaboration with regions support to Farmers**
- **Continuous follow up and Survey**
- **Short trainings to extension service providers;**



**Plant Protection
Directorate**



Efforts by d/t stake holders to control the insect

- **Technical support (EIAR, NARS, FAO, Hawassa University, DLCO-EA, ICIPE, CIMMYT, SG-2000, USAID.....)**
- **Field vehicle support**
- **Technical committee**
- **Monitoring tool**
- **Establish national research advisory team**
- **Produce survey protocol**
- **Participate in TOT**



**Plant Protection
Directorate**



- **Shortage of sprayers and PPE**
- **Shortage of field vehicle**
- **Since the pest is new, there is lack of awareness and technical gap**
- **Difficulty in control operation because the pest gets into the whorl of Maize**
- **Attentions given to mechanical control is minimum (hand picking and killing) - farmers are reluctant to do hand picking (except Sheka and Kaffa zones)**
- **Problem of pesticides use and handling**



Plant Protection Directorate



The way forward

- **Strengthen Early warning system and avail specific pheromone traps**
- **Scouting and monitoring of the insect year round**
- **Long term research to develop resistant varieties, biological and other control methods**
- **screening alternative, systemic pesticide options –**
- **Budget allocation to provide pesticides, sprayers and PPE; also for training and survey**
- **Studying migration pattern, direction, timing and survey**
- **Identifying host ranges (in our country) and its strain**



**Plant Protection
Directorate**



The Way Forward

- **Publication and distribution of more leaflets, poster and guideline, manuals**
- **Continued awareness creation at all levels**
- **Promoting mechanical control:**
- **‘remember killing one caterpillar can reduce 1500-2000 new caterpillars after 4 weeks**
- **Wide area survey out of cultivated crop land**



**Plant Protection
Directorate**



THANK YOU



**Plant Protection
Directorate**