

## 2<sup>nd</sup> International Conference on **Agricultural & Horticultural Sciences**

Radisson Blu Plaza Hotel, Hyderabad, India February 03-05, 2014

### Management of grain smut in seed production of Rabi sorghum [*Sorghum bicolor* (L.) Moench.-]

Ashok S. Sajjan, M. M. Jamadar and B. B. Patil  
University of Agricultural Sciences, India

*Sorghum bicolor* [(L.) Moench] commonly known as 'jowar' is the fifth most important cereal in the world next to wheat, rice, maize and barley. The rabi sorghum accounts for 56.3 percent of the total area under cultivation and 46.4 percent of the total production. The incidence of grain smut is quite common and most destructive in almost all sorghum growing areas of the world. During threshing the sori break and release the spores which adhere to the surface of healthy seeds and remain dormant till the next season. The grain smut of sorghum is caused by *Sporisorium* [*Sporisorium sorghi* (Link.) Willd]. The disease is also known as covered kernel smut or short smut. Besides India, the disease has been reported from United States, Italy, and South Africa etc. The grain smut pathogen on sorghum is externally seed borne. The smut sori break during threshing releasing the spores; that adhere to the surface of healthy seeds and remain dormant till the next season. The infection takes place before the seedlings emerge out. The conditions suited for delayed germination of seeds favour the smut infection. An attempt has been made to review the suitable fungicides for the management of grain smut of sorghum such as carbendazim, sulphur, thiram, carboxin. Among the several fungitoxicants reviewed belonging to different groups; the seeds treated with carboxin+thiram (vitavax power) followed by sulphur at 3.0 g/kg just before sowing recorded significantly higher seed yield and lesser smut incidence and better seed quality parameters.

#### Biography

Ashok S. Sajjan has obtained Ph.D. from University of Agricultural Sciences, Karnataka, India. He is working as Associate Professor of Seed Science and Technology and HOD. He has served twenty years in teaching, Research and Extension activities. The eleven students have completed post graduate under his chairmanship and they have employed in national and various state sector. He has published around 55 papers, 32 abstracts, several popular articles and few books at his credit. He has organized several training programmes, participated and delivered lectures during winter school, farmers and officer training programmes. He was awarded with Basav jyothe, Basav Bhusan, Dr. Abdul Kalam life time Achievement Award and Basav Shanti. He has visited and participated in Intensive vegetable production under protected condition at Israel, Plant breeding and seed production phase I at Sweden, plant breeding and seed production phase II at Zambia, international programme on alumni workshop on plant breeding and seed production at Cambodia.

assajjan@gmail.com