

## Poster Presentations

### Non-chemical control options

**Results:** Control efficiencies of BLS with strain Lx-11 were 62.5% and 60.2% in pot and field trials, respectively, significantly higher than those of 20% bismethiazol treatment (51.2% and 45.8%). Based on morphological, physiological and biochemical characteristics and 16S rDNA sequence analysis, the strain Lx-11 was identified to be *Bacillus amyloliquefaciens*. The surfactin of strain Lx-11 secreted might play an important role in controlling BLS. Strain Lx-11 might triggered a systemic immunization activity of rice.

**Conclusion:** Strain of *Bacillus amyloliquefaciens* Lx-11 can significantly reduced disease incidence of BLS. Bacterial leaf streak of rice was efficaciously controlled with strain Lx-11.

### P N-CCO 169

#### Effect of temperature and photoperiod on reproductive behavior of the corn stem borer, *Sesamia cretica* Led. (Lep.: Noctuidae)

M. Yaghoubi, A. Askarianzadeh, H. Abbasipour

Shahed University, Plant Protection, Tehran, Islamic Republic of Iran

[askarianzadeh@shahed.ac.ir](mailto:askarianzadeh@shahed.ac.ir)

The corn stem borer, *Sesamia cretica* Led. (Lep.: Noctuidae) is the most important pest of maize and sugarcane throughout the world. The egg parasitoid wasp, *Telenomus busseolae* Gahan (Hym.: Scelionidae) is reared and released against the pest in Khuzestan province of Iran as the most important natural enemy of the pest. Because of host specificity, it is only rearable on the natural host (*S. cretica*) in the laboratory or insectarium. In this study the best temperature and photoperiod condition on the reproductive behavior of the adult parasitoid was evaluated in the laboratory. For this purpose different attributes such as percentage of fertilized eggs, oviposition rate, peak of egg laying and adult longevity were evaluated. Temperature treatments were included 24, 27 and 30°C and photoperiod treatments were included 24D,12D:12L, 8L:16D (short day period), 16L:8D (long day period) hours. The result of the data statistical analysis showed that the best temperature for oviposition was 24 to 27°C and in 30°C, the rate of oviposition was significantly decreased. Also the temperature had not any effect on the percentage of fertilized eggs and adult longevity. In addition, different photoperiod duration had significant effect on the rate of oviposition, so that the highest oviposition occurred in 12L:12D hours and after that 16D:8L hours (short day period) and the lowest rate of oviposition was observed in 24D period. According to the results, photoperiod had not effect on the percentage of fertilized eggs and adult longevity. In the all temperature and photoperiod treatments, the peak of egg laying was occurred in second day of female oviposition.

### P N-CCO 170

#### The traditional use of saharian plant (haloxylon) by Algerian population and their antibacterial affect against the strains responsible for urinary tract infection

F. Bouabdelli<sup>1</sup>, A. Belhadj<sup>2</sup>, B. Kenza<sup>3</sup>

<sup>1</sup>University of Monstaganem, Biology, Mostaganem, Algeria

<sup>2</sup>Laboratoire de Recherche de Valorisation des Ressources Végétales et Sécurité Alimentaire des Zones Semi-Arides de Sud-Ouest Algérien -, Biology, Béchar, Algeria

<sup>3</sup>University, Biology, Bechar, Algeria

[kenzabenyahia828@yahoo.fr](mailto:kenzabenyahia828@yahoo.fr)

Natural extracts from plants contain a variety of therapeutic compounds, the survey focuses on the importance of *haloxylon* (*Chenopodiaceae*). This plant is traditionally used by the Algerian population against several infections. The aim of this study is to know the main microbial species responsible for urinary tract infection (UTI) in the South Algeria (Tamanrasset, Bechar and Ain Salah); to adjust the therapeutic and preventive attitudes to prevent the emergence of strains multi-resistant bacteria and monitor the effectiveness of traditional uses by identification of the active constituents of *haloxylon*. We evaluated antibacterial activity of crude extracts, flavonoids and alkaloids of selected plant. Moreover the highlighted separation methods by TLC [1], and GC of the active components (alkaloids, flavonoids and essential oils). All bacterial strains tested (*Proteus mirabilis*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*) have revealed a resistance to alkaloids and interesting sensitivity to crude extracts and flavonoids. Preliminary tests of this plant have revealed the presence of tannins, flavonoids, glycosides, alkaloids and saponins whereas the absence of anthraquinone derivatives and quinones. The crude extract of *haloxylon* at (5-15 and 30) minutes have a remarkable effect to *Proteus mirabilis*, which give different inhibition zones of diameters (10-16 and 20) mm; The high effect is shown in presence of *Escherichia coli* and *Staphylococcus aureus* in 30min that give the zones of 22 mm as diameter .the flavonoids tests confirm that *Haloxylon* has an important effect on *Staphylococcus aureus*, *Proteus mirabilis* and *Escherichia coli* by giving 21mm but a weak one on *Pseudomonas aeruginosa* with 10mm , On the other hand the alkaloids have no effect on the tested strains.