

In this issue

Research Article

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-236

Determination of the application rate and Frequency of Nimbecidine for the effective management of pea aphid *Acrythosiphon pisum* (Homoptera: Aphididae) on field pea

Published On: December 31, 2021 | Pages: 381 - 384

Author(s): Dagne Kora* and Ermias Teshome

The development of botanical insecticides as a novel and safer alternative strategy, botanical insecticides which contain plant extracts as active components are safer as well as environmentally friendlier than synthetic insecticides. The field experiment was conducted at Ginir district with the objectives to evaluate the Nimbecidine insecticide against field pea aphid ...

[Abstract View](#) [Full Article View](#) [DOI: 10.17352/2455-815X.000136](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-235

Evaluation and participatory variety selection of improved highland sorghum varieties for smallholder farm at west hararghe zone

Published On: December 24, 2021 | Pages: 374 - 380

Author(s): Temesgen Begna* and Hailu Gichile

Participatory variety selection is the most important breeding program which enhanced the adoption of improved varieties through creating awareness based on smallholder farmers' selection criteria. Several different improved sorghum varieties are released at different international and national research institutions at different times, however, the technologies were n ...

[Abstract View](#) [Full Article View](#) [DOI: 10.17352/2455-815X.000135](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-234

Assessment of the extent implementing the Good Manufacturing Practices

(GMPs) and Hazard Analysis Critical Control Point System (HACCP) in Sudan sugar industry factories

Published On: November 30, 2021 | Pages: 368 - 373

Author(s): AM Babeker, AI Ahmed, AR Ahmed and Mohammed Alhadi Ebrahiem*

The present study was conducted in Sudan Sugar industry factories (Kenana, White Nile, Assalaya, Sennar, Guneid, and New Halfa) during the production season of 2017. The study aimed to evaluate the existing Assessment of the extent of implementing the Good Manufacturing Practices (GMPs) and Hazard Analysis Critical Control Point System (HACCP) by Sudanese suga ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000134](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-233

Microbial and heavy metals examination of Expellers groundnut (Arachis hypogaea L.) oil

Published On: November 30, 2021 | Pages: 364 - 367

Author(s): Awad M Babeker, AA Abdalla, AR Ahmed and Mohammed Alhadi Ebrahiem*

This study was designed to determine the microbial and heavy metal contamination level in expeller's groundnut oil. Ten samples of groundnut oil were collected, labeled from E1 to E10 and the microbial and heavy metals examination tests were laboratory assessed. The study results showed that, the Total Count of Bacteria (TCB) for all oil Expellers samples was 33.8 Col ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000133](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-232

Cluster based Oat-vetch mixtures for forage production in Dodola district of West Arsi Zone, Ethiopia

Published On: November 30, 2021 | Pages: 359 - 363

Author(s): Nabi Husein* and Lelisa Diriba

The present activity was conducted at Keta Berenda kebele of Dodola district of West Arsi Zone of Oromia in 2019 cropping season with the objectives to evaluate cluster-based pre-scaling up fodder oat mixture with vetch, collect farmers' opinion on the performance of the technology, improve farmers' knowledge and skill of application of the improved technology through ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000132

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-231

Toxicity of entomopathogenic fungi against *Spodoptera frugiperda* larvae under laboratory conditions

Published On: November 17, 2021 | Pages: 355 - 358

Author(s): Muhammad Ayaz Shahzad, Muhammad Irfan, Ahmad Abdul Wahab, Farhan Zafar*, Abdulrehman, Muhammad Shuban and Muhammad Raheel Saleem

Maize Fall Armyworm (FAW), *Spodoptera frugiperda* (Lepidoptera: Noctuidae) is considered an economically important pest and becoming the main threat to food security. This polyphagous pest is widely distributed in various countries of the world especially tropical and subtropical regions. The toxicity of two entomopathogenic fungi such as *Metarhizium anisopliae* and *Bea* ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000131

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-230

Suitability of bio-extracts with coating materials on physicochemical quality of tomato fruits (*Solanum Lycopersicum* L.) stored at ambient temperature

Published On: November 10, 2021 | Pages: 347 - 354

Author(s): Desta Dugassa Fufa*

Tomato (*Solanum Lycopersicum* L. (or) *Lycopersicon esculentum* Mill.) is being a very nutritious and health protective food, are highly perishable nature. Its sensitivity to postharvest loss due to poor handling, diseases and physical injury limits its successful marketing. Therefore, simple technology is required to reduce the postharvest loss of this commodity. The us ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000130

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-229

Non-destructive allometric models for leaf area prediction of *Jatropha curcas* L.

Published On: November 10, 2021 | Pages: 341 - 346

Author(s): Krishan Kumar Verma*, Chhedi Lal Verma and Munna Singh

Jatropha curcas received a lot of attention as a biodiesel feedstock in several countries around the world. The leaf area (LA) estimation is important for biological research due to its close relationship to soil fertility, plant physiological parameters, and photosynthetic efficiency. Allometric models for reliable and accurate models for estimating the leaf area of ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000129](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-226

Evaluation of the yield performance of maize cultivars (*Zea mays* L.) in a Semi-Arid Region of the Eastern Cape Province, South Africa

Published On: October 26, 2021 | Pages: 327 - 330

Author(s): Mxolisi Mtyobile*

Maize is considered as one of the important grain crop in the world. Maize is in high demand within district because it is one of the staple food and also used for animal feed. Current yield attained by small scale farmers is lower than the potential of our existing varieties. In field experiment at Njizweni situated in Gqeleni sub-district was conducted in November 2 ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000126](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-225

Identification, characterization and evaluation of honeybee floras in Kafa, Sheka and Benchi Maji Zones of Southern Nations Nationalities and Peoples Region (SNNPR), Ethiopia

Published On: October 20, 2021 | Pages: 310 - 326

Author(s): Tesfu Shegaw* and Dawit Habte Giorgis

The study was aimed with identifying and characterizing honeybee floras and their flowering seasons in south western parts of the country. Relevant data were collected through conducting questionnaire survey, focus group discussions, field observations and lab analysis of pollen and honey samples. In addition, seasonal performance of colonies in terms of brood area, a ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000125

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-224

Land suitability evaluation for surface irrigation development using parametric evaluation approach: The case of Gudina Wacho watershed, Western Ethiopia

Published On: October 19, 2021 | Pages: 302 - 309

Author(s): Gebre Gidey Weldeabzgi*, Tekalign Ketema, Gezahegn Gashu and Sime Deressa

Evaluating land suitability of a given watershed is vital to predict potential and limitation of the land for surface irrigation. The present study was evaluated the suitability of Gudina Wacho watershed for surface irrigation development using parametric evaluation approach. The watershed was classified in to four lands mapping units, based on three soil profile pits ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000124

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-223

Pre-scaling up of improved finger millet (Kako-1) variety, at Weyira district, under Halaba zone in Ethiopian

Published On: October 14, 2021 | Pages: 297 - 301

Author(s): Mekonen Debara* and Merkinel Bekele

Pre-scaling up of improved finger millet variety (kako-1) was conducted in 2019/20 mehere season in Halaba Zone, two selected kebeles under Weyira District,southern Ethiopia under rain fed conditions through involvement of farmers in participatory demonstration. The demonstration was carried out with the specific objectives:to popularize and demonstrate improved Finge ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000123

[Open Access](#) | [Research Article](#) | PTZAID:IJASFT-7-220

Effects of replacement noug seed cake (Guizotia abyssinica) with treated

tagasaste (*Chamaecytisus palmensis*) leaf meal on egg quality traits of layer hens

Published On: October 04, 2021 | Pages: 277 - 284

Author(s): Amare Sisay Sendekie*, Habtamu Ayalew Kasahun and Yohannes Dagnew Alemayhu

Egg quality traits are significantly impacted by nutritional factors either deficient or excessive quantities in the layer diets. In this study one hundred eight, 32 weeks age of Bovans Brown chickens were used as an experimental animals. Four iso-nitrogenous and iso-caloric based ration diets were formulated. The level of ration replacing NSC by TTLM was at 0%(T1), 5 ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000120](#)

[Open Access](#) [Research Article](#) PTZAID:IJASFT-7-218

Natural bee bread positively regulates lipid metabolism in rats

Published On: September 04, 2021 | Pages: 266 - 271

Author(s): Zhen Li, Qiang Huang, Yibo Liu, Chengtao Peng and Zhijiang Zeng*

Natural bee bread contains various active ingredients, which can promote human health. However, the functional evaluation of bee bread is seldom reported. We conducted this study to evaluate the effect of natural bee bread on lipid metabolism using rats as model organism. Rats were treated with three doses of bee bread (80 mg/kg, 400 mg/kg and 800 mg/kg). A blank co ...

[Abstract View](#)

[Full Article View](#)

[DOI: 10.17352/2455-815X.000118](#)

Review Article

Review of highland sorghum improvement research in Ethiopia

Published On: November 10, 2021 | Pages: 335 - 340

Author(s): Zigale Semahegn* and Temesgen Teressa

Sorghum is the most well-known helpful cereal crop for poor farmers in Ethiopia's dry lowland areas due to it's a high yielding, drought tolerant, nutrient use efficiency crop that can be grown over 80 % of the worlds' cultivated land. It has many advantages in the economic lives of the farmers in the highlands of the country. It is a source of food, feed, fuel, const ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000128

Review on biological degradation of biogenic amines in food

Published On: October 28, 2021 | Pages: 331 - 334

Author(s): Jihao Zeng, Jinhong Wu*, Huiyun Chen and Sui Ni*

In this paper, the application of biological methods to reduce biogenic amine content in foods was introduced. Biogenic amine oxidase, a special protein that can degrade biogenic amine into acetaldehyde, hydrogen peroxide and ammonia, has been introduced in this paper, and two major amine oxidases and their degradation effects on different biogenic amines were briefly ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000127

A systematic review of encapsulation and control release technology in food application

Published On: October 12, 2021 | Pages: 292 - 296

Author(s): Melaku Tafese Awulachew*

This review paper is aims to give a brief description of encapsulation and control release technology in food preservation. Besides the material give potential information for those who interested for future development perspectives of the sector and also create awareness potentially for readers, traders, Students, factory workers, technologist and related stakeholder ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000122

[Open Access](#) | [Review Article](#) | PTZAID:IJASFT-7-221

Empirical review on determinants of potato and onion production technology packages adoption in Ethiopia

Published On: October 11, 2021 | Pages: 285 - 291

Author(s): Oliyad Sori Zenbaba*

Vegetable production technology packages adoption is essential for intensifying its productivity thereby improve the income of smallholder farmers in Ethiopia. Analog to vegetable, production adoption of Potato and onion also play a great role in improving the daily livelihood of farmers. However, there are few studies on its technology adoption to encourage farmers t ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000121

[Open Access](#) | [Review Article](#) | PTZAID:IJASFT-7-219

Urea triazone fertilizers-A slow-release nitrogen fertilizer

Published On: September 13, 2021 | Pages: 172 - 176

Author(s): Michael M Hojjatie*

Urea is one of the most widely used nitrogen fertilizers worldwide. More than 90% of the world's production of urea is used as fertilizer [1a]. Soil bacteria containing urease enzyme, catalyze the conversion of urea to ammonia and carbon dioxide via ammonium carbonate formation and decomposition. Nitrogen from urea can be lost to the atmosphere as a gas if fertilizer ...

[Abstract View](#) | [Full Article View](#) | DOI: 10.17352/2455-815X.000119