



significant difference among different concentrations and plant extracts and solvents for extraction at 5 per cent level of significance. The data for the different concentrations revealed the highest inhibition (96.85%) at 2.00 per cent concentration (T_5). and lowest inhibition (70.51%) was found at 0.25 per cent concentration (T_1). Among the plant extracts maximum value (95.46%) was found for *A. calamus* L. (E_1) treated wood sample, whereas the minimum (80.07%) was recorded for the *P. hysterophorus* L. (E_2). Among the solvents used for extractions, highest value (88.06%) was found for the wood samples treated with petroleum ether extract (S_2), whereas the minimum (87.48%) was noticed for the wood samples treated with methanol extract (S_1). Interactions between plant extracts and concentrations, concentrations and solvents used for extraction and plant extracts and solvents used for extraction were found statistically significant at 5 per cent level of significance. The second order interactions between concentrations, extracts and solvents for extraction were also found to be significant at 5 per cent level of significance. The present investigation is help in development of new wood preservatives which is ecofriendly with environment and degradable after using the wood and this investigation also help in the biopulping.

FARMER SUICIDES IN MADHYA PRADESH

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Abstract

The study comprises 50 Households related to victims' family of Rewa district of Madhya Pradesh as numbers of victims were found to be maximum in this particular district in the year 2014-15 and intensive survey of these respondents was carried out in the year 2015-16. It is observed from the data that the prominent causes of farmer suicides in Madhya Pradesh as recognised by the majority of the respondents were found to be family problems i.e. illness (46%), drug abuse/alcoholic addiction (32%), fall in social reputation (22%), extra martial affairs (36%) and frequent quarrel between victims and family member (20%). None of farmers was found to commit suicides due to poverty and property disputes. The main problems of suicides were found to be lack of access to mental health services in rural areas and shame attached to treatment (82%), lack of rehabilitation centres for drug and alcoholic addiction (78%) and lack of avenues for off/non farm income (52%). Therefore it is suggested that the government should remove the bottlenecks and increase access in remote areas. In addition to these a psychologist must be appointed in Govt. Hospitals and rehabilitation centre for drug abuse and alcoholic addiction should be established at least at block level particularly in identified hot spots of farmer suicides districts of the state. Efforts should also be made so that crop insurance scheme should reach at individual level and health insurance should be made mandatory with Govt. support for the farming community. A campaign should also be launched for crop/variety diversification in various agro climatic regions of Madhya Pradesh. The role of various social institutions must be increased for this in future for increasing awareness of different development programmes of state and central govt. amongst the farmer community.

PERFORMANCE OF DIFFERENT GENOTYPES OF GAILLARDIA (*GAILLARDIA PULCHELLA*FOUG.) IN RESPECT TO FLOWERING, QUALITY AND YIELD PARAMETER

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Abstract

An experiment was carried out at the Instructional Farm, Department of Floriculture and Landscaping, College of Horticulture & Forestry, Jhalrapatan, Jhalawar, (Agriculture University, Kota) during the period from March, 2017 to September, 2017 to study the performance of the twelve genotypes of gaillardia (*Gaillardia pulchella*Foug.) in respect to flower, quality and yield parameter. Among the twelve genotypes of gaillardia, the maximum plant height (81.03 cm) was recorded in the genotype 'Genotype-3'. The minimum days taken to first flower opening (42.60 days), days taken to 50 per cent flowering (64.3 days), the maximum flower diameter (6.29 cm), number of ray florets per flower (214.26), number of whorls of ray florets (5.96), *in-situ* life of flower (12.06 days) and number of flowers per plant (131.53) was recorded in 'Genotype-11'. The maximum flower stalk length and shelf life of flower (15.66 hours) was recorded in 'Genotype-10' (32.64 cm). The maximum duration of flowering (143.66 days) was found in 'Genotype-3' which was at par to the (139.40 days) 'Genotype-11'. The maximum