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The Fiftyfive-Year Rule

The fundamental rules relating to the age of retirement of public servants are obviously empirical and operate unevenly within the limits of even a single branch of service. In the case of the higher posts in the judicial department and cabinet, the fiftyfive-year rule is relaxed, while it is more or less rigidly applied to the appointments in other branches of the administration.

The age limit imposes practically no bar to the assumption of elective offices by retired government servants, and posts in the gift of the Crown are equally exempt from age restrictions. In all business concerns and industrial organizations, the directing authorities hold their offices virtually for life.

It is commonly argued that the age rule, though a purely arbitrary one, must be upheld in order to maintain in the services a uniformly high standard of efficiency which, it is feared, advancing age is apt to sterilize; and to secure for administrative problems that freshness and optimism of outlook which a comparatively youthful and more energetic mind may reasonably be supposed to possess. From an economic stand-point, the age rule scarcely appears to be a sound business proposition, and the consideration that the wastage due to retirement provides some measure of

relief to unemployment seems to be its chief recommendation. Generally speaking, it is true that the efficiency of a person depends not only on his protein metabolism but to a large extent also on the climatic conditions of the country in which he lives; and the influence of adverse environmental factors is likely to be more acute in the case of those who, born in more favourable situations, suddenly find themselves in different and more exacting circumstances, than in the case of races who through centuries have become perfectly inured to them. But this is not all. Of still more fundamental importance is the fact that the treatment accorded to the public servant has a direct influence on his official efficiency. It must be within the experience of all officials that if their career is not embittered by disappointments, and on the other hand, their hopes and ambitions are systematically and periodically fulfilled, their capacity

for service is retained unimpaired till an advanced old age. The influence of mind on the discharge of duties is far more profound than is commonly recognized.

It is impossible to assume that the age of a person at fiftyfive in itself impairs his mind to the extent of disqualifying him for the performance of public functions. The constant vigilance and tireless energy so necessary for a successful business organization in which the directing authorities have to keep all their fingers on the pulse of the market, finance and labour, do not appear to be foreign to them though they may have crossed the official age limit. The official duties of the Prime Minister and of his colleagues in the Cabinet must be certainly of a very arduous character yet in their assumption, consideration of age plays little or no part. Really we are dealing with two classes of offices in public affairs where an anomalous position is created. Those which are in the gift of the government are regulated by age rules and others virtually in the gift of the electorate are independent of them, though in both the nature and volume of work to be transacted are almost the same, and if there is any dif-

ference at all the incidence is certainly heavier in the case of elective appointments...

The decision of the Government to terminate the services of professors at fiftyfive years is one of those rules which in their very nature must operate unequally. It is perfectly true that some professors are too old at fifty or even forty, especially such as have neither a hobby nor vital interests beyond absolute routine; it is equally true that others are quite young at sixty-five or even seventy. It seems to us that in the higher branches of education, a living mind endowed with a wide and varied experience, a ripe and unfaltering judgment, a real enthusiasm and power to initiate and conduct research and a judicious temper and discernment must be a more valuable and indispensable asset than buoyance and vigour whether to universities or governments. Such a mind confers prestige and creates tradition. The two-fold nature of the work devolving on a professor demands at once a power and readiness on his part to put himself on a level with young and inexperienced men and a faculty to seek and establish variety in his own work. Age is commonly believed to produce in

mind, a warped and embittered view of life, a total lack of sympathy with the overflow of youth, a dogmatic assertiveness 'and an idealized memory of the greatness of past time'. These effects, it must be remembered, are more pronounced in other walks of life than in teaching and so long as the professor maintains an inquisitive spirit towards learning and research, he is practically immune from the mental disease of old age. There are numerous cases of professors old according to government rules but young enough to retain their original freshness and mobility of mind to be able 'to share in the enthusiasm of the young and to travel with them along the same road'. The truth is that old age is not due to years but depends largely on circumstances and temperament 'and the remedy therefore lies less in general rules than in the treatment accorded to the professor during his career'. Compulsory retirement at fiftyfive years, we are convinced, is not a satisfactory remedial measure for a sickness which may have had its origin almost at the commencement of the service or even before. Subsequent conditions may either allay or aggravate the malady.

SCIENTIFIC CORRESPONDENCE

Efficacy of the plant, *Polygonum hydropiper* against rice brown planthopper *Nilaparvata lugens* Stal.

Polygonum hydropiper, known as kalatadi, galpudi, gahurunia and gotkinamaru in different tribal areas, is a weed generally occurring in muddy or swampy places of canal sides and river banks of eastern India (Figure 1). Leaves of the plant are mainly used as a fish poison and in some areas it is used to kill ticks and mites of cows and buffaloes. In view of its usage as an acaricide as well as piscicide, the plant was tested for its insecticidal property, if any, against the insect brown planthopper *Nilaparvata lugens* Stal (BPH), a serious pest of rice.

Solvent extract from leaves with different solvents such as acetone, ben-

zene, alcohol, chloroform, hexane, methanol and water was made and the solvent was evaporated leaving the extract as solid residue. This was dissolved in *n*-butyl alcohol and kept as the stalk solution, which was mixed with water at the time of application along with labolene as an emulsifier at the rate of 0.5 ml per 100 ml of solution.

Extracts were applied separately to the potted plants of variety Jaya in the net house. Untreated plants sprayed with water were kept as control. Each treatment was replicated thrice. Fifth instar nymphs of BPH (20 insects per replication) were released on plants

after the application of the botanical. Insects were kept confined to the plant by long-necked glass chimneys. Mortality count was taken after 24 h of release. This was repeated in each case with different weight of leaf samples till the lethal dose against the insect was obtained.

Parallely, the plants already harbouring BPH of different instars were treated by different solvent extractions of 100 g leaf sample which was found to be the lethal dose for benzene extraction obtained in the earlier experiment. Then, insects were observed daily to note their development and also mortality.