

## Management of white grubs in teak nurseries

Teak (*Tectona grandis*) is one of the major forest timber tree species in central Indian states of Madhya Pradesh, Chhattisgarh, Maharashtra and Orissa. In central India, the preferred planting material is root-shoot (7-8" stumps just above the roots of teak developed from seedlings grown in raised nursery beds), rather than teak seedlings grown in root trainers. root-shoots of teak are sturdier under field conditions due to good food reserves, economical easy in transporting to the plantation sites and thus have exhibit better survival in field. The productivity of these root-shoots in forest nurseries is often affected by incidence of 'white grubs' inhabiting soil of nursery beds. White grubs (immature larval stages of Scarabaeid) are potential pests (adults known commonly as chafer beetles), capable of causing almost 100% mortality in nursery stock.

It has been observed that the frontline forest nursery staffs are not adequately aware of life cycle of this pest. There are some general hand-books on insect pests in forest nurseries published and extended to the users, however, absence of proper guide-lines specific to the management of white grubs has been one of the major reasons for the lack of awareness. Hence, this advisory is being brought out, which is concurrent to the recent investigations on white grub management based on the globally accepted concept of Integrated Insect Pest Management (IIPM).



Fig- Life cycle of white grubs and beetles