

★★★ <第34回知的財産翻訳検定試験【第18回和文英訳】> ★★★
《 1 級課題 -バイオテクノロジー- 》

【問 1】

While the effectiveness of tea has been recognized , tea seeds are not always used effectively enough. Naturally, the tea plant is an evergreen shrub belonging to the genus *Camellia* of the Theaceae family, and its seeds contain oil as an ingredient. Efficient extraction of the oil would lead to a wide range of uses especially as a food material.

For this reason, some people have been trying to use tea seed oil. Considering the commercial profitability, however, its use is not feasible, because the amount of tea seed oil that can be extracted is about 10% or less based on the original weight of the tea seeds.

One of the reasons is that tea seeds are nuts-like seeds in which embryos and endosperms (hereinafter collectively referred to as seed embryos in the present specification) are covered with a hard testa, so that it is labor-intensive to take out seed embryos containing the oil components.

【問 2】

(4) Since the distillation temperature of the efficacy enhancer A is 160 to 170 °C/3 mmHg, distillation does not require any special equipment but can be carried out using ordinary equipment.

It is also possible to carry out an isomerization reaction to (Exo type + Endo type) by directly heating the efficacy enhancer A to 210 °C or higher.

Conventionally, when mosquito or fly incenses are produced with an efficacy enhancer of the active ingredient blended therein, the active ingredient and the efficacy enhancer are individually blended so as to be integrated with another base material. In the present invention, however, like the case of (3), the present agent in which the compound A and the efficacy enhancer A are mixed in advance is blended with another base material, and it is possible to obtain a better insecticidal efficacy than in the above-mentioned individual blending, as will be described later in the Examples.

【問 3】

Mice were infected with the GFP-PbA parasite. Although the mice did not show any visible ECM symptoms on day five after infection, blood vessels were labeled with red TRITC-dextran and images were taken over 30 minutes, as shown in Figure 2A. It was observed that some of the parasites slowed down and attached to blood vessels. Five videos were taken, and the same was true for five mice on day five after infection. As seen in video S1, some of the GFP-labeled parasites slowed down and/or some of them stopped, eventually causing occlusion. This was consistent with significantly higher parasite load measured by 18S rRNA levels and T cell accumulation in the OLF on day six after infection compared to other parts of the brain (Figure 2C). Taken together, these results suggest that the OLF may be a region specific for ECM pathogenesis, possibly due to its palisade like capillary structure, and due to this, the circulating iRBC may slow down, adhere to the same, and/or be isolated, ultimately leading to bleeding.

【問 4】

Claim 1. A non-human primate model having thalamic pain, or a part thereof, wherein the primate model has angiopathy in a region, where at least one sensory nerve fiber runs, in the ventral posterolateral nucleus of the thalamus, and wherein the part of the body corresponding to the sensory nerve fiber exhibits an allodynia-like symptom due to the angiopathy.

Claim 2. The primate model or part thereof of claim 1, wherein the primate model has angiopathy in a region, where a sensory nerve fiber of the upper limb or lower limb runs, in the ventral posterolateral nucleus of the thalamus, and wherein the upper limb or the lower limb exhibits an allodynia-like symptom due to the angiopathy.

Claim 4. The primate model or part thereof of any one of claims 1 to 3, wherein the primate model does not have angiopathy in any regions of the brain other than the ventral posterolateral nucleus of the thalamus.