A case study: The benefit essential oil of bukhoor (*Aquilaria Malaccensis*) to decrease respiratory distress in COVID-19 era

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**Abstract:**

**Introduction:**
Coronavirus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a virus that attacks the respiratory system. The disease due to this viral infection is called COVID-19. Coronavirus can cause mild disorders of the respiratory system, severe lung infections, and death. Imam Bukhari wrote that Bukhoor is known to be an excellent aroma to strengthen the body and mind. The Prophet (SAW) said: "Indulge in raw Arabian incense (Oud Al-Arab) to have the cure for seven ailments; by smelling the fragrance if someone has throat problems and by putting it in the mouth (smoked like a candy pen) when suffering from pleurisy."

**Aim:**
To prove that Bukhoor can decrease asthma symptoms in respiratory distress caused by CoV-19

**Method:**
The patient with respiratory distress was measured by peak flow before and after treatment with a humidifier given by *Aquilaria malaccensis* as the essential oil every night. At least 30 minutes every night. Patients can choose to measure breath between 7 and 9 a.m. and between 6 and 8 p.m. The patient then decides to take peak flow meter measurements before and after using the bukhoor humidifier. It is then recorded and flattened.

Agarwood might be a resinous an aspect of the non-wood Aquilaria tree, which might be an exceptionally significant item for medication and aroma purposes. To ensure the imperiled Aquilaria species, mass ranch of Aquilaria trees has become a feasible path in Asian nations to get the exceptionally important agarwood. As likewise physiologically set off Aquilaria tree can deliver agarwood, viable enlistment strategies are for quite some time looked for inside the agarwood business. In this article, we intend to present an outline for the past endeavors toward the comprehension of agarwood arrangement, the evolvement of acceptance techniques and their further improvement possibilities by coordinating it with high-throughput omics approaches.

Agarwood or Gaharu as it is known in numerous Asian nations is resinous heartwood that happens in trees having a place with the sort Aquilaria. The Aquilaria tree is a quickly developing, subtropical timberland tree, with a populace going extending from South Asia’s Himalayan lower regions, all through Southeast Asia, and into the rainforests of Papua New Guinea. It develops at rises from a couple of meters above ocean level to around 1000 meters, with approx. 500 meters being generally ideal.

Aquilaria can develop on a wide scope of soils, including helpless sandy soil. Seedlings require a lot of shade and water however will develop quickly, delivering blossoms and seeds as right on time as four years of age.

So as to create agarwood oil, the heartwood trees should be tained. This should be possible with organisms. When the trees’ regular guard begins Cell and organ culture s to work, they will create a substance known as oleoresin. The oleoresin is the thing that gives the agarwood fundamental oil its solid scent. An extraction cycle including carbon dioxide is utilized to separate the oil from the wood. The oil created is exceptionally dim and incredibly gooey. Aquilaria has a place with the Thymelaeaceae group of angiosperms, which is endemic to the Indomalayan domain. Until this point in time, there’s a finished of 21 Aquilaria species which are reported and 13 of them are perceived on the grounds that the agarwood-delivering species. The damaging misuse of agarwood, nonetheless, has gravely influenced the wild populace of all Aquilaria species.

Since solid Aquilaria tree doesn’t frame agarwood, leaving it worth close to nada, the shortage of present agarwood has incited the occasion of counterfeit agarwood-instigating strategies. Endeavors to falsely actuate the agarwood arrangement are frequently followed back to as ahead of schedule as 300 C.E. in the Chinese history, where it had been recorded that pitch testimony went with shading changes of inside tissues can occur inside a year by harming the trees. Other than mechanical injuring approach, the use of compound, creepy crawly and microbe prompting methods is progressively regular inside the agarwood business these days. Those acceptance strategies regardless copy the characteristic cycles of agarwood arrangement, which have their own qualities and shortcomings. In this article, we attempt to gracefully a more extensive inclusion of existing enlistment
techniques and their improvement possibilities utilizing the headway of biotechnology. To all the more likely comprehend the agarwood development measure, the atomic component of optional metabolite biosynthetic pathways hidden the tar creation additionally will be explained.

*Aquilaria Malaccensis* is a tropical woodland tree from the family Thymelaeaceae, a jeopardized backwoods species and was recorded in CITES since 1995. Privately known as Pokok Karas, this tree produces agar wood or gaharu, a profoundly significant, resinous and fragrant backwoods item. Karas has been profoundly perceived for its immense therapeutic qualities and gaharu has been broadly use for perfumery, incense and strict purposes. The phyto synthetic investigations of agar wood indicated that Sesqui terpenoid and Phenyl ethy chromone subsidiaries are the chief intensifies that have against unfavorably susceptible and hostile to organism exercises. Cell and organ culture frameworks build up give huge scope creation of biomass and offers possibilities for the creation of auxiliary metabolites. This paper depicts the work accomplished for building up reproducible frameworks for callus commencement and creation of cell suspension societies just as creation of unusual roots that will later be amiable for the creation of optional metabolites of A. malaccensis.

**Result:**
The woman, 29 years old with respiratory distress, confirm positive with a rapid test, using a Bakhoor humidifier in a week for 30 minutes daily. We find an improvement of Peak Expiratory Flow Rate from the red zone to the green area after treatment.

**Conclusion:**
*Aquilaria Malaccensis* or Bakhoor as the therapeutic properties of aromatic medicines affecting the flow of the vital force in the lungs, chest, and heart.