

= Phallus hadriani =

*Phallus hadriani*, commonly known as the dune stinkhorn, is a species of fungus in the Phallaceae ( stinkhorn ) family . It is a widely distributed species , and is native to Asia , Europe , and North America . In Australia , it is probably an introduced species . The stalk of the fruit body reaches up to 20 cm ( 7 @. @ 9 in ) tall by 4 cm ( 1 @. @ 6 in ) thick , and is spongy , fragile , and hollow . At the top of the stem is a ridged and pitted , thimble @-@ like cap over which is spread olive @-@ colored spore slime ( gleba ) . Shortly after emerging , the gleba liquefies and releases a fetid odor that attracts insects , which help disperse the spores . Said to be edible in its immature egg @-@ like stage , it typically grows in public lawns , yards and gardens , usually in sandy soils . *Phallus hadriani* may be distinguished from the similar *P. impudicus* ( the common stinkhorn ) by the presence of a pink or violet @-@ colored volva at the base of the stem , and by differences in odor .

= = Taxonomy = =

The species was first described scientifically by the French botanist Étienne Pierre Ventenat in 1798 , and sanctioned by Christiaan Hendrik Persoon under that name in his 1801 *Synopsis Methodica Fungorum* . Christian Gottfried Daniel Nees von Esenbeck called the species *Hymenophallus hadriani* in 1817 ; this name is a synonym . According to the taxonomical database *Index Fungorum* , additional synonyms include : *Phallus iosmus* , named by Berkeley in 1836 ; *Phallus imperialis* , Schulzer , 1873 ; *Ithyphallus impudicus* var. *imperialis* and *Ithyphallus impudicus* var. *iosmos* , De Toni , date unknown .

The specific epithet *hadriani* is named after the Dutch botanist Hadrianus Junius ( 1512 ? 1575 ) , who wrote a pamphlet on stinkhorn mushrooms in 1564 ( *Phalli , ex fungorum genere , in Hollandiae* ) .

= = Description = =

The immature fruiting bodies of *P. hadriani* in the egg stage have dimensions of 4 to 6 cm ( 1 @. @ 6 to 2 @. @ 4 in ) by 3 to 4 cm ( 1 @. @ 2 to 1 @. @ 6 in ) , and are colored rosy @-@ pink to violet . They typically have rhizomorphs ( aggregations of mycelium that resemble plant roots ) at the base . The eggs are enclosed in a tough covering and a gelatinous layer that breaks down as the stinkhorn emerges . Mature fruiting bodies , which may be 10 to 20 cm ( 3 @. @ 9 to 7 @. @ 9 in ) tall by 3 to 4 cm ( 1 @. @ 2 to 1 @. @ 6 in ) thick , have a white- or cream @-@ colored hollow stipe that is spongy and honeycombed . The head is reticulate , ridged and pitted , and covered with olive green glebal mass . The volva is cuplike , and typically retains its pink color although it may turn brownish with age . Fruit bodies are short @-@ lived , typically lasting only one or two days .

Although the odor of *P. hadriani* has been described by some authors as faint and pleasant or like violets , others describe the smell as fetid or putrid . The gleba is known to attract insects , including flies , bees , and beetles , some of which consume the spore @-@ containing slime . It is thought that long @-@ distance spore dispersal is facilitated by these insects , who may deposit in their feces intact spores that survive the passage through the digestive tract .

The spores are cylindrical , smooth , and hyaline ( translucent ) , with dimensions of 3 ? 4 by 1 ? 2 µm . The basidia ( spore @-@ bearing cells ) are cylindrical , with dimensions of 20 ? 25 by 3 ? 4 µm . They have eight sterigmata ( slender extensions that attach to the spores ) , as well as a clamp at their base .

= = Edibility = =

Like many other stinkhorns , this species is thought to be edible when in its egg form . Central Europeans and the Chinese consider the eggs a delicacy . Regarding the edibility of mature specimens , one author commented on the genus in general , " No one with his sense of smell developed would think of eating the members of this group . "

= = = Similar species = = =

*Phallus impudicus* has the same overall appearance as *P. hadriani* , but is distinguished by its white volva . Another similar stinkhorn , *P. ravenelii* has a smooth , not reticulate head .

= = Habitat and distribution = =

*Phallus hadriani* is known to be in Australia ( where it is thought to be an introduced species imported on woodchip mulch used in gardening and landscaping ) , North America , Europe ( including Denmark , Ireland , Latvia , The Netherlands , Norway , Poland , Slovakia , Sweden , Ukraine , and Wales ) Turkey ( I?d?r Province ) , Japan , and China ( Jilin Province ) .

*Phallus hadriani* is a saprobic species , and thus obtains nutrients by decomposing organic matter . In North America , it is commonly associated with tree stumps , or roots of stumps that are decomposing in the ground . In Great Britain , its distribution is more or less restricted to coastal dunes , while in Poland , it has been noted to avoid humid and humic forest soils , and live in symbiosis with xerophilous grasses and the black locust tree , *Robinia pseudoacacia* . The mushroom is one of three species protected by the Red Data Book of Latvia .