To study family Agaricaceae, about 44 specimens were collected from seven different districts of Punjab, Pakistan, during different field visits. The visited districts include Gujranwala, Kasur, Khanewal, Lahore, Narowal, Rajanpur and Vehari. Out of 44 collected specimens of family Agaricaceae, 34 proved to be different. All the taxa belong to one family (Agaricaceae) and eight genera (*Agaricus*, *Chlorophyllum*, *Coprinus*, *Lepiota*, *Leucoagaricus*, *Leucocoprinus*, *Macrolepiota* and *Podaxis*). Among 34 reported species, twelve taxa belong to genus *Agaricus*, six of *Leucoagaricus*, four each of *Chlorophyllum*, *Coprinus* and *Leucocoprinus*, two belong to *Macrolepiota* and one each of *Lepiota* and *Podaxis*. Seventeen species (*Agaricus augustus*, *A. bitorquis*, *A. glabriusculus*, *A. pakistanicus*, *A. parviniveus*, *A. trisulphuratus*, *Chlorophyllum hortense*, *C. molybdites*, *C. rhacodes*, *Coprinus comatus*, *C. micaceus*, *C. plicatilis*, *Lepiota vellingana*, *Leucoagaricus badhamii*, *La. lahorensiformis*, *Macrolepiota dolichaula and Podaxis pistillaris*) were known to be already reported from Pakistan. While thirteen taxa (*Agaricus diminutivus*, *A. impudicus*, *A. luteopileus*, *Chlorophyllum globosum*, *Coprinus atramentarius*, *Leucoagaricus centricastaneous*, *La. crystallifer*, *La. leucothites*, *Leucocoprinus brinbaumii*, *L. cretaceus*, *L. heinemanni*, *L. rhodolepis* and *Macrolepiota mastoidea*) reported as new records for Pakistan. Although, the identity of four taxa (*Agaricus* cf. *argenteus*, *A.* cf. *robustulus*, *Agaricus* sp. and *Leucoagaricus* sp.) will be further confirmed by molecular phylogenetic analysis because morphologically they do not show any resemblance with any of the described taxa of respective genus. Most of the species were reported as new records for their respective districts, but *Agaricus pakistanicus* was recorded as second report from district Lahore and Pakistan. Collected specimens have been identified using morpho-anatomical analysis and ITS-nrDNA based molecular characterization.