## Genomic DNA Isolation and Purification: ZR Fungal/Bacterial DNA Kit

- 1. Add **750 µl** of **Lysis solution** to the **ZR Bashing Bead<sup>™</sup> Lysis Tube** along with two big loopfuls of bacterial/fungal cells.
- 2. Secure tube in the bead beater, fillted with a 2.0 ml tube holder assembly (holds up to 16 samples), and process as max speed for 1-2 minutes.
- 3. Centrifuge the lysis tube at 10,000 rpm for one minute.
- 4. Insert a **Zymo-Spin<sup>™</sup> IV Spin Filter** (organe top, snap off base of spin filter prior to use) into a **collection tube**.
- 5. Add **1,200 µl** of **Fungal/Bacterial DNA Binding Buffer** to the filtrate in collection tube from step 5.
- 6. Transfer **800** µI of the mixture from step 6 to a **Zymo-Spin<sup>™</sup> IIC Column** in another collection tube and centrifuge at 10,000 rpm for one minute.
- 7. Discard flow through from the collection tube and **repeat step 6**.
- 8. Add **200** µI of **DNA Pre-Wash Buffer** to the **Zymo-Spin<sup>™</sup> IIC Column** and centrifuge at 10,000 rpm for one minute.
- 9. Add **500 μI** of **Fungal/Bacterial DNA Wash Buffer** to the **Zymo-Spin**<sup>™</sup> **IIC Column** and centrifuge for one minute.
- 10. Transfer the **Zymo-Spin<sup>™</sup> IIC Column** to a clean sterile 1.5 ml microcentrifuge tube and add **25-30 µl** of **DNA Elution Buffer or Water** directly to the column matrix. Centrifuge at 10,000 rmp for 30 seconds to elute the DNA.
- 11. The DNA is now purified and ready for PCR.